The impact of culture on environmental education in Java, Indonesia

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This thesis is presented for the degree of Doctor of Philosophy of The University of Western Australia
School of Social Sciences
Disciplines of Anthropology and Sociology and Asian Studies
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Date: 18 November 2018
Acknowledgement

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Thank you to my community of friends in Jogja and Surabaya. Thel, the kids and I loved every minute of our time with you all. My Jogja friends are like no others. Thank you.

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Thank you to Lyn Parker, my mentor, for believing in me and providing me with an opportunity to combine my passion for learning, Indonesia and the natural environment.
Abstract

Environmental education (EE) can play an important role in developing environmentally conscious and active citizens. Indonesia faces many environmental problems of local, national and international significance. By developing a more environmentally conscious and active population, Indonesia will be better placed to deal with these environmental problems and mitigate problems into the future. This thesis aims to investigate how EE could contribute to the development of more environmentally aware and active schools and students in Indonesia.

The thesis is an anthropological study of EE in and around senior high schools in two cities in Java, Indonesia: Yogyakarta and Surabaya. It is based on one year of fieldwork in schools and with environmental non-government organisations (ENGOs). Using in-depth ethnographic data derived from participant observation, supplemented with interview data and the study of government documents, it explores how ‘culture’ impacts on the conceptualisation, practice and positioning of EE in the Indonesian education system. The thesis highlights the impact that leadership has had on achieving impressive environmental outcomes and participation levels in EE in Surabaya and how a lack of leadership in the environmental space has contributed to increasing environmental problems, very low participation rates in EE, and apathy amongst teachers and the wider community in Yogyakarta. The thesis aims both to increase understanding of how EE is practised by schools and ENGOs, and to instigate academic discussions of how ‘culture’ influences environmental perspectives and approaches to EE.

Through critical consideration of the data, the thesis argues that learners are subjected to a form of EE that is ineffective in educational terms. This finding highlights the need to consider how current EE programs could be adapted to be more culturally appropriate and accommodate the requirements of the education system, while achieving meaningful educational and environmental outcomes. The thesis offers a model to achieve this.
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<th>Definition</th>
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<tbody>
<tr>
<td>Adiwiyata</td>
<td>national environmental education program</td>
</tr>
<tr>
<td>asli</td>
<td>original/ originally from</td>
</tr>
<tr>
<td>Badan Lingkungan Hidup</td>
<td>Environmental Agency office</td>
</tr>
<tr>
<td>Bahasa Indonesia</td>
<td>the Indonesian language</td>
</tr>
<tr>
<td>Bapak/ Pak</td>
<td>Father, Mr, or a general honorific for an older man</td>
</tr>
<tr>
<td>bersih</td>
<td>clean</td>
</tr>
<tr>
<td>biopori</td>
<td>holes in the ground to allow rainwater to be absorbed</td>
</tr>
<tr>
<td>bule</td>
<td>white skinned person/ foreigner</td>
</tr>
<tr>
<td>Bupati</td>
<td>District head</td>
</tr>
<tr>
<td>COP</td>
<td>Centre for Orangutan Protection</td>
</tr>
<tr>
<td>desa</td>
<td>village</td>
</tr>
<tr>
<td>DESD</td>
<td>Decade for Education for Sustainable Development</td>
</tr>
<tr>
<td>DIY</td>
<td><em>Daerah Istimewa Yogyakarta</em> (The Special Region of Yogyakarta)</td>
</tr>
<tr>
<td>eco-mobil</td>
<td>van used for incursions to schools by Green Action NGO</td>
</tr>
<tr>
<td>EE</td>
<td>Environmental Education</td>
</tr>
<tr>
<td>EFS</td>
<td>Education for Sustainability</td>
</tr>
<tr>
<td>ENGO</td>
<td>Environmental Non-Government Organisation</td>
</tr>
<tr>
<td>ESD</td>
<td>Education for Sustainable Development</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus group discussion</td>
</tr>
<tr>
<td>gotong royong</td>
<td>mutual cooperation</td>
</tr>
<tr>
<td>Gubernur</td>
<td>Governor</td>
</tr>
<tr>
<td>halus</td>
<td>refined</td>
</tr>
<tr>
<td>hitam</td>
<td>dark/ black</td>
</tr>
<tr>
<td>Ibu/ Bu</td>
<td>Mother, Mrs, or a general honorific for an older woman</td>
</tr>
<tr>
<td>isin</td>
<td>embarrassment</td>
</tr>
<tr>
<td>Jaringan Pendidikan Lingkungan</td>
<td>Environmental Educators Network</td>
</tr>
<tr>
<td>jilbab</td>
<td>Muslim headscarf worn by women</td>
</tr>
<tr>
<td>jijik</td>
<td>disgusting</td>
</tr>
<tr>
<td>joglo</td>
<td>Javanese style building</td>
</tr>
<tr>
<td>Jumat</td>
<td>Friday</td>
</tr>
<tr>
<td>K-12</td>
<td>Kindergarten – year 12</td>
</tr>
<tr>
<td>Term</td>
<td>Meaning</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>Kabupaten</td>
<td>District</td>
</tr>
<tr>
<td>kakak</td>
<td>older sibling</td>
</tr>
<tr>
<td>kampung</td>
<td>neighbourhood</td>
</tr>
<tr>
<td>kampanye</td>
<td>protest or campaign</td>
</tr>
<tr>
<td>kasar</td>
<td>un-refined</td>
</tr>
<tr>
<td>kerja bakti</td>
<td>volunteer service/ working together</td>
</tr>
<tr>
<td>KLHK</td>
<td>(Kementerian Lingkungan Hidup dan Kehutanan) Ministry of Environment and Forests</td>
</tr>
<tr>
<td>kota</td>
<td>city</td>
</tr>
<tr>
<td>kotor</td>
<td>dirty</td>
</tr>
<tr>
<td>KPK</td>
<td>(Komisi Pemberantusan Korupsi) Crime and Corruption Commission</td>
</tr>
<tr>
<td>KTSP</td>
<td>(Kurikulum Tingkat Satuan Pendidikan) Indonesian national curriculum of 2006</td>
</tr>
<tr>
<td>kraton</td>
<td>Palace of the Sultan</td>
</tr>
<tr>
<td>lingkungan hidup</td>
<td>environment/ natural environment</td>
</tr>
<tr>
<td>lomba</td>
<td>competition</td>
</tr>
<tr>
<td>madrasah</td>
<td>Islamic day schools</td>
</tr>
<tr>
<td>mahasiswa</td>
<td>university student</td>
</tr>
<tr>
<td>Maghrib</td>
<td>sunset Muslim prayer</td>
</tr>
<tr>
<td>MAN</td>
<td>Madrasah Aliyah Negeri / state Islamic senior high school</td>
</tr>
<tr>
<td>mandi</td>
<td>to bathe (usually with a bucket of water and scoop)</td>
</tr>
<tr>
<td>mandiri</td>
<td>independent</td>
</tr>
<tr>
<td>Mas</td>
<td>Javanese term for a young male/ respectful term for older brother</td>
</tr>
<tr>
<td>Mbak</td>
<td>Javanese term for a young female/ respectful term for older sister</td>
</tr>
<tr>
<td>MOEC</td>
<td>Ministry of Education and Culture</td>
</tr>
<tr>
<td>nasional</td>
<td>national</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Government Organisation</td>
</tr>
<tr>
<td>nrimo</td>
<td>Javanese value of acceptance</td>
</tr>
<tr>
<td>onto‐epistemic‐based narratives</td>
<td>narratives combining ontology (theory of being, study of the nature of the world) and epistemology (theory of knowing, the study of how we understand the world)</td>
</tr>
<tr>
<td>paksarela</td>
<td>(paks sukarela), forced volunteering</td>
</tr>
<tr>
<td>pamrih</td>
<td>intention or personal motive</td>
</tr>
<tr>
<td>Term</td>
<td>Translation</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>pemuda</td>
<td>politically active youth</td>
</tr>
<tr>
<td>pendidikan lingkungan hidup</td>
<td>environmental education</td>
</tr>
<tr>
<td>pesantren</td>
<td>Islamic boarding schools</td>
</tr>
<tr>
<td>Prakarya</td>
<td>Home Industries (subject)</td>
</tr>
<tr>
<td>praktek</td>
<td>practical/ hands-on</td>
</tr>
<tr>
<td>Presiden</td>
<td>President</td>
</tr>
<tr>
<td>Propinsi</td>
<td>Province</td>
</tr>
<tr>
<td>reformasi</td>
<td>post-1998 reform era</td>
</tr>
<tr>
<td>remaja</td>
<td>adolescent</td>
</tr>
<tr>
<td>RT</td>
<td>(Rukun Tetangga) Neighbourhood / Community Association</td>
</tr>
<tr>
<td>rukun</td>
<td>Javanese value based on the appearance of social harmony</td>
</tr>
<tr>
<td>Sabtu</td>
<td>Saturday</td>
</tr>
<tr>
<td>sawit</td>
<td>oil palm</td>
</tr>
<tr>
<td>sampah</td>
<td>rubbish</td>
</tr>
<tr>
<td>sungkan</td>
<td>Javanese value of knowing one’s place</td>
</tr>
<tr>
<td>SMA</td>
<td>Sekolah Menengah Atas (senior high school)</td>
</tr>
<tr>
<td>SMK</td>
<td>Sekolah Menengah Kejuruan (vocational senior high school)</td>
</tr>
<tr>
<td>SMP</td>
<td>Sekolah Menengah Pertama (junior high school)</td>
</tr>
<tr>
<td>takakura</td>
<td>a form of composting</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>urmat</td>
<td>Javanese value of the role of respect</td>
</tr>
<tr>
<td>Walikota</td>
<td>Mayor</td>
</tr>
<tr>
<td>warung</td>
<td>food stall</td>
</tr>
<tr>
<td>wayang</td>
<td>Javanese puppet theatre</td>
</tr>
<tr>
<td>wuduh</td>
<td>washing before Islamic prayer</td>
</tr>
</tbody>
</table>
Chapter One: Introduction

This thesis is a study of environmental education (EE) in senior high schools in the two cities of Yogyakarta and Surabaya in Java, Indonesia.\(^1\) It explores how ‘culture’ impacts on definitions and practice of EE in schools in Indonesia and how current educational programs could be adapted to be more culturally appropriate and accommodate the requirements of the education system, while achieving meaningful educational and environmental outcomes. In order to do this, the study investigates the development of EE as a field in Indonesia and the role of UNESCO in its development, the factors that led to its introduction in the schools in this study and how it is conceptualised and practised in schools in the two cities. In order to develop a clear picture of the situation, the roles of government agencies and NGOs are examined with consideration of the factors accounting for greater participation and student engagement in one city as compared to the other. The role of students, student voice and student action are explored. These themes are used to highlight the importance of ‘culture’ for students and the impact that it has on attempts to adapt global approaches to EE to the Indonesian context.

Rationale

Indonesia is home to some of the world’s most significant natural resources and biologically diverse ecosystems. However, in 2014 The World Bank reported that ‘environmental values are not deeply embedded in society, leading to undervaluation of natural resources and environmental services’ (The World Bank, 2014). This lack of environmental values and undervaluation of natural resources and services contribute to Indonesia’s on-going struggles with crippling environmental problems and environmental disasters (see below). Cities across Indonesia provide evidence to support The World Bank’s findings, with large volumes of litter in every waterway and roadside, liquid waste disposed of into waterways, and no apparent concern for retaining greenspace on private and government land. Despite these problems, there is very little research around environmental values in Indonesia. While it is clear that Indonesian society lacks strong environmental values, the more challenging and important question is around how to develop these values and build environmental sensitivities in this populous, religious and economically advancing nation.

\(^1\) Yogyakarta is also often spelt Jogjakarta and referred to as Jogja.
The simple answer is education, but we know that developing environmentalism is a complex, value-laden task that requires individuals and societies to challenge the status quo, question their own capitalistic, consumeristic behaviours and make changes (Barrett, Hart, Nolan, & Sammel, 2005; Dillon, Kelsey, & Duque-Aristizabal, 1999; Jickling, 2003; Stibbe, 2004). This requires understanding of the complexities of environmental issues and their interconnectedness with economic, social and cultural factors. While EE can offer an avenue for this, the results we have seen in the Global North suggest that governments need to play a leadership role in leading change towards sustainability. P. Hart and Hart (2014) argue that there are alternative values and worldviews to those that have long dominated EE research discourse; these alternative values and worldviews deepen the argument for onto-epistemic-based narratives in the construction of social-environmental identities. They suggest that provision for socio-cultural variations is more meaningful in EE research than focusing on environmental attitudes, as ‘these variations direct researchers to investigate the habitus, the socio-cultural, relational settings from which identity-agencies arise’ (P. Hart & Hart, 2014:49). That is what this thesis does through application of Bourdieusian frameworks, and consideration of how culture impacts on education and EE in Indonesia. This thesis is based on ethnographic studies of EE in Java and considers how national approaches to education play out in school-based activities in Yogyakarta and Surabaya. It does not attempt to draw generalisations, but offers insights into cultural variation and difference in EE. P. Hart and Hart (2014:52) suggest that ‘work directed toward understanding environmental identity, conceptualized within cultural discourses, has potential to counter-narrativize generalized accounts of environmental behavior studies as rather singular, acultural dominant discourse concerning change’. This thesis contributes to the EE field by offering work that considers EE conceptualised within Javanese cultural discourses, offering a counter-narrative to the majority of EE literature that focuses on the Global North.

This thesis focuses on EE in senior high schools. Research on senior high school EE is under-represented in the literature, particularly outside of the Global North. Reasons for this are explored in the following chapter. There are many unique positives from researching students in the senior high school age bracket (16-18 years). Senior high school students are highly educated by Indonesian standards, often live away from home (living in boarding houses) and make consumer-related choices. They are also on the brink of adulthood and are generally articulate and astute, offering unique insights with their experiences and views. There is still an under-representation of student voice and student experience in EE research. Senior high school students are well equipped to contribute to research and offer insights in to their EE experience. For these reasons this thesis focuses on this interesting and engaging group.
It is important to examine how Indonesia, a newcomer to EE, is taking up the challenge of developing environmentalism in what are environmentally desperate times. Indonesia is the world’s fourth most populous nation (United States Census Bureau, 2018), has a growing economy with a growing demand for energy, is the 2nd largest plastics polluter (Langenheim, 2017) and a growing contributor to carbon emissions (The World Bank, 2018a). Indonesia is struggling with large-scale and serious environmental problems, increasing development and an under-performing education system. Without change, these problems will continue to grow in size and severity, with national and international impacts. In order to be in a position to offer culturally appropriate, realistic proposals for improvement in these areas, we need to understand the current position, and how it came to be – meaning that we need to understand the relevant histories and culture.

This thesis contributes to a scarce collection of literature on Indonesian EE and is the first to consider culture and its impact on EE. Research for this thesis was undertaken as part of a larger, Australia Research Council Discovery Grant project which considered how education contributes to environmentalism in Indonesia. Whilst my colleagues focused on the tertiary sector, the National Curriculum, farmers and NGOs, my project contributed with research on EE in senior high schools, examining its development, current approaches, the cultural complexities that influence it and the possibilities for a culturally sensitive approach to EE.

Sauvé, Berryman, Brunelle (Berryman & Sauvé, 2016; Sauvé, 2008; Sauvé, Berryman, & Brunelle, 2007; Sauvé, Brunelle, & Berryman, 2005) and N. Gough (N. Gough, 2002, 2003, 2014) have contributed valuable work around the globalisation of EE. While Sauvé et al. (2005) considered national policies for six different nations and Quebec (none from Asia), there is no available literature that examines the impact of this globalisation ‘on the ground’. There is a lacuna in research that considers the impact of the globalisation of EE in the Global South, with data and perspectives of those involved in the practice of it. In order to consider the importance of culture in EE, this thesis had to firstly consider how EE came to develop and the influence of UNESCO and globalisation on EE in Indonesia.

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2 The larger study is entitled ‘Fostering Pro-Environment Consciousness and Practice: Environmentalism, Environmentality and Environmental Education in Indonesia’ (DP130100051).

3 The documents examined were from United Kingdom, Bolivia, France, Cuba, Brazil, Colombia and Quebec (Canada).
While there is an ever-growing collection of research on EE in Global North countries, access to publications in English from Global South countries is still lacking. The Global North is the ‘default position’ in discourses of EE, and anything outside of that is still ‘other’ (N. Gough, 2003; Jickling & Wals, 2008). Despite the international impacts of environmental problems and prolific use of the term ‘think global’ in EE, the academic literature on EE in schools remains a Western, secular, science-based discourse (N. Gough, 2003; Parker, 2016). Compared to the Global North, Indonesia faces huge environmental problems and is under-researched and inadequately addressed in the EE literature. There have been limited studies on school-based EE in Indonesia. Hadisuwarno (1997) explored the relationship between teachers’ knowledge and attitudes and the influencing factors in their background, such as socio-demographic elements, professional and training experience, and school environment. Kusmawan, O’Toole, Reynolds, and Bourke (2009) used survey data to examine the impact of different teaching methods on the environmental attitudes of senior high school students; Parker (2016) considered the role of the curriculum in Indonesian EE; and Maulidya, Mudzakir, and Sanjaya (2014) examined the environmental literacy of middle school learners. Kusmawan (2007) completed a doctoral thesis on student attitudes and their impact on promoting sustainable environmental citizenship in the Tasikmalaya region of West Java; and Jaskolski (2007) utilised action research as a way of evoking agency in secondary school students involved in sustainability education in Bali as a focus for her doctoral thesis. Considering the scale and severity of environmental problems that Indonesia is facing, there is a clear need for a better understanding of how EE can contribute to a more positive future in Indonesia. Because most literature around EE comes from the Global North, it is easy to assume that the aims, barriers and influences for EE are universal. While at times they are presented as such (Ballantyne, Connell, & Fien, 2006; Ballantyne, Fien, & Packer, 2001; Eilam & Trop, 2014), it is not the case. In order to contribute to effective EE in the places where it is most needed (the Global South), further research needs to be done in more diverse contexts.

When researching and writing about EE, and particularly EE in Global South contexts, it is important that we researchers are conscious of what N. Gough (2003:63) refers to as ‘epistemological

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4 It is therefore important that we consider research from ‘unconventional’ places, such as Meek’s (2015) work with schools in the Brazilian landless workers’ movement.

5 I acknowledge the use of the terms Education for Sustainability and Education for Sustainable Development. I chose to use the term Environmental Education throughout my research and this thesis because it was the term that most teachers and students were familiar with (pendidikan lingkungan hidup). Unlike ESD, it is explicit that it is about the environment and does not focus on development.

6 Fien, Yencken and Skyes’s (2006) book, Young People and the Environment: An Asia-Pacific Perspective, included Indonesia in ‘aspects of the study’ but Indonesia was not one of the ten countries with a chapter devoted to it and was referred to only in vague acknowledgement of its Islamic population and population-related environmental issues.
imperialism’ and do not present Eurocentric approaches to EE as ‘global’ or ‘international’ approaches. P. Hart and Hart (2014) urge researchers of EE to explore how the interplay between knowledge and identity provides grounds for troubling what it means to educate and, in particular, what it means to educate environmentally. They argue that understanding how educators construct environmental identities within cultural discourse is crucial to understanding the participation gap within EE/ESD. By considering the role and impact of culture and tradition on EE, this thesis identifies and investigates the cultural discourse around EE in Indonesia and the participation gap in EE. Examination of cultural discourse also provides insight into how EE is being used as vehicle for achievement, winning and prestige.

This thesis provides an ethnographic study of EE in senior high schools in Yogyakarta and Surabaya, where the approaches to EE are different to those often written about or aimed for in publications from the Global North and international agencies such as UNESCO. This thesis offers insight into how and why current Indonesian approaches came about and suggests ways forward with consideration of culture and social and educational traditions.

The research questions

The thesis seeks to answer the following questions:

1. How are EE programs delivered in the selected senior high schools?
2. What were the factors that led the schools to introduce an EE program?
3. How does ‘culture’ impact on the conceptualisation and practice of EE in Indonesia?
4. What roles do environmental Non-Government Organisations (ENGOs) play in the implementation of EE programs in senior high schools?
5. What factors account for the different levels of uptake and engagement of EE programs in Indonesian senior high schools?
6. How can current educational programs be adapted to be culturally appropriate and accommodate the requirements of the education system, while achieving meaningful educational and environmental outcomes?

Scope and methods

This thesis focuses on EE in senior high schools in two cities in Java, Indonesia. As outlined in Chapter Four, Yogyakarta was originally intended to be the sole focus of the research. It was selected on the basis of its reputation as a city leading in education. Due to the lack of EE being undertaken in
Yogyakarta, Surabaya was selected as a research site based on its environmental progress. This study did not aim to consider different levels of schooling or locations beyond the two cities and did not explore in depth issues of teacher capabilities and training.

The ethnographic component of this study was conducted over a 12-month period in the two cities. There was a focus on senior high schools, two environmental NGOs (Centre for Orangutan Protection in Yogyakarta and Green Action in Surabaya\(^7\)), and the city and district level governments. Data were gathered through participant observation in schools and with NGOs, interviews with teachers, NGO staff and government officials, and focus group discussions with students and teachers. Prior to, during, and after the fieldwork component of my research, I read and considered any available documentation on EE from regional and national government departments, school text books and UNESCO and NGO reports. This diverse array of data provided for an in-depth study of EE in senior high schools in Indonesia. My fieldwork and data collection were aided significantly by previous experience studying, living and working in Indonesia, contacts in the environmental field and language and cultural fluency.

Hill (1988) and Monfries (2015) both note the difficulties of explaining one culture in the language of another. This is indeed a challenging task and I have endeavoured to write this thesis in a way that will resonate with readers who have a background in Indonesian culture and education and those with an interest in EE and little experience of Indonesia.

**Outline of the thesis**

This thesis is based on an ethnographic study and aims to provide rich, in-depth descriptions to assist the reader to understand the Javanese way of viewing the world and ultimately how culture impacts on education and EE in Indonesia. My views and accounts of my experiences are interwoven with references to the literature on Javanese culture, education in Indonesia and environmental education. I found that these three elements were intertwined and I have presented them as such, with chapters that focus on these elements in the context of the two cities of Yogyakarta and Surabaya.

The next chapter, Chapter Two, introduces the reader to Indonesia. It provides a brief background on Indonesia’s geographic, linguistic, cultural and religious diversity before moving to Javanese culture, the historical role of youth activists and the role of the civil servant. The chapter includes an

\(^7\) Green Action is a pseudonym.
introduction to Indonesia’s natural environment, education and EE in order to familiarise the reader with the context of the study, which sits largely outside of the literature on EE.

In Chapter Three I provide a textual perspective on EE. The chapter commences with consideration of culture and its role in education. I introduce Bourdieu’s concepts of capital and habitus as a theoretical framework and apply them to the Javanese context. Through reviewing the literature, the chapter explores what EE is (as defined in the Global North) and the complexities and challenges of combining environment and education in the formal education system. Throughout the chapter I highlight the gaps in the literature and expose the way that EE research conducted in the Global North is often considered universally applicable. I suggest that it is not, and that context and culture are too significant to be overlooked.

Chapter Four is the Methodology chapter. It describes how the research was conducted and the rationale for it. It provides some background on the researcher, describes the research design, participants, research sites, data collection and analysis methods, and concludes with some ethical and cultural considerations.

In order to offer structure for the reader and highlight the differences in the outcomes of EE in the two cities, I offer one chapter each on Yogyakarta and Surabaya (Chapters Five and Six). The roles of schools, government, and NGOs are described in detail and considered in relation to the available literature. Data from focus group discussions, observations and interviews are used to illustrate the difficulties and shortcomings of EE in each city and consideration is given to the importance of Javanese culture within the education system and EE.

Chapter Seven provides a discussion of the themes that arose in the two preceding chapters. In doing so, it explores the structure, definition and expectations of Indonesian EE within the broader education system and prevailing education culture. I use Bourdieu’s theory of habitus, social, symbolic and cultural capital, and symbolic violence to interrogate the intersection of culture and power within EE in the Javanese context. I discuss how EE in the two cities diverges from UNESCO’s definitions of ESD and provide comment on how culture impacts on the definitions and practice of EE. The chapter highlights missed opportunities in Indonesian EE and the role and potential for NGOs. It concludes with a culturally appropriate model for Indonesian EE that could meet expectations related to prestige and reward, while offering positive learning and environmental outcomes.
The final chapter of this thesis draws together the main findings from the preceding chapters, highlighting the contrast in outcomes in EE in the two cities and arguing the need for more culturally appropriate EE. It considers how EE could be reconceptualised within the Indonesian context to accommodate cultural expectations around education and Javanese social stratification, commenting on the role that external agencies could play in this. The chapter concludes by highlighting the contributions that this thesis makes to literature on EE in a global context, as well as in Indonesia, and discusses the possibilities for future research.

Current literature and EE programs promoted at the international level typically consider EE approaches and pedagogies to be globally applicable. Countries in the Global South are expected to adopt approaches and pedagogies that are promoted as a result of Global North experiences with a lack of consideration for cultural sensitivities, inflicting a form of epistemological imperialism on Global South EE efforts. Research which can contribute to the development of culturally sensitive EE will have positive benefits for general education systems (not just EE), societies and the natural environment in local contexts, as well as offering a much needed perspective from outside of the Global North. As an exploration of the current EE efforts in Yogyakarta and Surabaya that considers the role and impact of international aims in EE, this thesis demonstrates that internationally promoted characteristics of education for sustainable development (ESD) are largely incompatible with Indonesian educational and cultural expectations and that Indonesia requires an approach to EE which accounts for these.
Chapter Two: Indonesia, Java and education: An introduction

Introduction

The purpose of this chapter is to introduce the context of this study and provide an overview of the most important aspects of Indonesia and Java to assist the reader with the chapters that follow. The chapter begins with an introduction to the diversity of Indonesia. The chapter then moves to introduce the reader to Java and Javanese culture and with this, a focus on the values considered most important to the Javanese, all of which are related to the value of respect. The chapter provides consideration of the historical role of youth activists (pemuda and mahasiswa) and the role of the civil servant, past and present. The reader is introduced to the state of the natural environment in Indonesia in an effort to highlight the complexity of environmental problems and the urgent need for positive change. The chapter then presents an overview of the education system in Indonesia – its structure, curriculum and approaches to teaching, before concluding with current efforts in EE and the role of NGOs.

Background on Indonesia

Indonesia is an emerging middle-income country. It is home to more than 300 ethnic groups and 700 living languages making it one of the most culturally and linguistically diverse countries on Earth. The 17,000 (plus) islands that make up the nation of Indonesia straddle the equator and spread across the seas to the north-west of Australia. Of these 17,000 islands, some 6,000 are inhabited by people (Sandee, 2016). The capital city, Jakarta is situated in the west of Java.
Indonesia is neither a secular nor an Islamic state, but it is a religious state (Parker, 2016). It is the largest Muslim-majority country in the world and recognises five other religions: Protestantism, Catholicism, Hinduism, Buddhism and Confucianism. Indonesia is the fourth largest country in the world in terms of population and is the world’s tenth biggest economy (The World Bank, 2018b). Indonesia is often celebrated for its functioning democracy and religious diversity. While these are impressive features of Indonesia, in some parts of the country, there are ongoing struggles to maintain religious harmony and recent years have seen bombings and increased reports of Islamist militant activity. Most of Indonesia’s public services are lacking, and the eastern islands suffer from a severe
lack of public infrastructure. In recent years, there has been a concerted effort to develop basic infrastructure in the eastern islands, particularly Papua, in order to address severe inequality issues between western and eastern Indonesia and realise trade opportunities (Tarahita & Rakhmat, 2017; Yulisman, 2015).

Indonesian (Bahasa Indonesia) is the official language of Indonesia. There are over 700 living languages spoken in Indonesia (Badan Pengembangan dan Pembinaan Bahasa [Agency for Language Development and Promotion], 2017). While most Indonesians (79.5 percent) speak their regional language in the home, the number of people speaking Indonesian at home is increasing (Na’im & Syaputra, 2011). Over 92 percent of Indonesians reported being able to speak Indonesian in the last census (Badan Pusat Statistik [Bureau of Statistics], 2010a).

According to The World Bank (2018), out of a population of 252 million, more than 28 million Indonesians still live below the poverty line and approximately 40 percent (approximately 100 million people) live just above the poverty line, and are therefore vulnerable to falling into poverty (The World Bank, 2018b). In larger cities such as Jakarta, Medan and Surabaya, there is evidence of very high levels of wealth, by any standard, and differences in wealth can be confronting. Public education is compulsory for students in years 1-9. While government schools are not allowed to charge fees, most schools request pre-determined donation amounts as standard practice for attending students. The amount is determined by the school in association with the Provincial Government (Hakim, 2017). These donations, known as Education Development Contributions (Sumbangan Pembinaan Pendidikan), and Education Contribution Funds (Dana Sumbangan Pendidikan) are only allowed to be charged by senior high schools (Sekolah Menengah Atas (SMA)) and vocational schools (Sekolah Menengah Kejuruan (SMK)) (Pemerintah Republik Indonesia [Government of the Republic of Indonesia], 2008). Despite this regulation, many junior high schools and primary schools still request donations. The cost of uniforms, transport, lunches and stationary can make education very expensive for many families. As outlined later in this chapter, Indonesia has high participation rates in all levels of schooling for both boys and girls, and many parents work very hard to provide the best possible education for their children.

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9 The percentage of the population speaking Indonesian as their language in the home grew from 10.7 percent in the 1990 census to 19.9 percent in 2010 (Na’im & Syaputra, 2011). Central Java has one of the highest rates of regional language use in the home (98 percent) (Na’im & Syaputra, 2011).
Java and Javanese culture

Both research sites in this study are situated in Java and both are home to indigenous Javanese.\(^{10}\) Yogyakarta, situated in Central Java, is well known as the cultural home of the most refined (halus) Javanese language and culture. While a culture as rich as the Javanese cannot and should not be simplified to a few descriptors, there are various values in Javanese culture that are uncommon or less influential in Global North societies that I identified as significantly influencing EE in the two cities. These values include a desire for and reliance on strong leadership, the role of respect (urmat), knowing one’s place (sungkan) and the importance of the appearance of social harmony (rukun). All of these values centre on ‘respect’.

H. Geertz (1989 [1961]) explains that the cluster of Javanese values centring on ‘respect’ is a guide to social behaviour for the Javanese in many different contexts – dealing with government officials, in schools, in political parties, and in relationships among neighbours and family members. For any anthropologist living in Java, ‘respect’ is highly visible in all of these contexts (Anderson, 1990 [1972]; Beatty, 2002; Guinness, 2009; Jay, 1969; Keeler, 1985; Kuncaraningrat, 1989; Magnis-Suseno, 1997; Mulder, 1992; Sullivan, 1994), and this research project was no different. H. Geertz (1989 [1961]) explains that ‘respect’ in Javanese society is based on the traditional Javanese view that all social relationships are hierarchically ordered, and on the moral imperative to maintain and express this mode of social order as a good in itself. Guinness (1986) refers to social stratification and the Javanese appearance of commitment to it both from those being ‘subordinated’ and those who are ‘pressing’. The actual commitment, Guinness argues, is not necessarily to social stratification, but to maintaining social harmony, known in Javanese as rukun. Rukun is the Javanese determination to minimise overt expression of any kind of social and personal conflict in order to maintain harmonious social appearances (H. Geertz, 1989 [1961]). It is marked by cooperation, mutual acceptance, calm and unity and can refer to a calm peace within oneself, or to mutual acceptance, calm and unity within a community (Magnis-Suseno, 1997; Siswayanti, 2013).

Nrimo, the value of acceptance, is considered one of the principal values of Javanese culture (Siswayanti, 2013; Wulandari, 2017).\(^{11}\) Wulandari (2017) addresses what she considers a misconception where nrimo has been interpreted as underlying laziness or apathy. She explains that nrimo, for Javanese society, is an attempt to control oneself so as not to become excessively angry,

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\(^{10}\) Not all people living in Java are Javanese. Javanese populate the central and eastern parts of Java, while the Sundanese occupy the western parts. The two groups have distinct languages and cultures.

\(^{11}\) Nrima is an alternative spelling.
disappointed, or of low self-esteem and despair, but to be calm and focused on finding solutions to problems (Wulandari, 2017:135) (my translation).

The desire for harmonious social appearances was evident in my ethnographic research. Teenagers in Javanese society have a much lower social standing than their teachers and are expected to take instruction without question or criticism. As described later in this chapter, their views and input are not sought in their education experience. Students often had ideas about how their EE programs could develop or improve, but reported that they were feeling sungkan – reluctant to do or say something on account of another person’s higher status. Students were often made to be responsible for tasks in EE that were physically challenging, under very hot, dirty and smelly conditions. Why these teenagers would do this without complaint can be partly attributed to sungkan and rukun. While they might not want to undertake these activities, they understood their place relative to that of their elders (sungkan), the value of social harmony (rukun) and the importance of acceptance of the situation (nrimo). Berman (1998:52) explains that in Java, agency is a social act of responsibility to one’s community, not necessarily to oneself. This, however, is not to suggest that Javanese society is always a place of passive acceptance. Much of the literature on Javanese values was published in the New Oder period, or before. Post-1965 violence and protest movements since suggest that these values have served governments and those in positions of power well, but their value going forward in a democracy is susceptible to change.

Bourdieu’s theory of habitus is useful in understanding how and why Javanese youth appear to calmly accept their (lesser) position in society without question. Bourdieu describes habitus as the ‘product of the internalization of the structures of that world’ and argues that even the most disadvantaged individuals ‘tend to perceive the world as natural and to accept it much more readily than one might imagine’ (Bourdieu, 1989:18). Bourdieu explains that habitus implies a ‘sense of one’s place’, but also a ‘sense of the place of others’ and through habitus, society’s norms appear self-evident and a result of common sense and therefore go unquestioned by many. He also notes that ““interpersonal” relations are never, except in appearance, individual-to-individual relationships and that the truth of the interaction is never entirely contained in the interaction’ (Bourdieu, 1977a:81). This is evident in student-teacher relationships in the senior high schools. While students had ideas that could have benefited the EE programs, they knew (subconsciously or consciously) that it was not a matter of Ami (student) sharing her idea with Bu Ida (teacher), but that of a child not knowing her place when interacting with an elder.
While there are many migrants to Java, Javanese cultural identity, practices and language are still strong among those of Javanese descent in Yogyakarta and Surabaya. Javanese language and culture, including values, expectations of youth and ways of socialising, have a predominant position in Yogyakarta and Surabaya, but they are not hegemonic. Surabaya is more multi-ethnic than Yogyakarta, with many migrants from across the archipelago including many Madurese and Chinese-Indonesians, yet Javanese culture prevails in politics, schooling and the broader community (Graham, 2002). This is not to say that the culture of the two cities is the same, but they both have underlying Javanese cultural values. I argue that Javanese values remain operative in a multi-ethnic city such as Surabaya partly as a result of Javanese leadership nationally, both historically and presently. Many of the students and teachers in this research also explicitly identified Javanese culture as being an influencing factor on their behaviour. For these reasons, I believe it is valid to consider the role and impact of Javanese culture on EE in the Surabayan context.

**Youth activists – pemuda and mahasiswa**

While Javanese children are taught to know their place, demonstrate respect for elders and take a passive approach to life (H. Geertz, 1989 [1961]), there is also a recent history of youth political action in Indonesia. *Pemuda* is the term given to Indonesia’s politically active youth. The *pemuda* of Indonesia played a pivotal role in Indonesia’s struggles for independence from the Dutch. Lee (2011:316) recounts the well-known story and imagery around the declaration of independence where *pemuda* defied their elders and ‘kidnapped Soekarno to force him to declare independence on 17 August 1945 while Indonesia was still under Japanese occupation’ (Lee, 2011:316). Lee argues that the specific historical contexts in which different generations of youth were politicised or engaged in radical politics appear as variations on the *pemuda* narrative and this is evident in the timeline of crises involving *pemuda* – beginning with colonial reforms in the late nineteenth century up to the *reformasi* of 1998. Lee (2011:317) explains that the ‘pemuda narrative provided a ready-made vehicle for present day youth to assume a powerful and revolutionary “new” identity that was already naturalized and politically situated to its time and place—crisis and transformation in Indonesia’. Aspinall (2012:159) argues that from 1966, *mahasiswa* (university student) became a powerful and politically loaded term, arguably even displacing *pemuda* as agents of revolutionary political change. He argues during the New Order regime, Chinese-Indonesians were made to ‘assimilate’ yet were still identified as ‘different’ from Indigenous Indonesians. These policies were changed post-Suharto but the impacts remain. See Freedman (2003); Hoon (2008); Purdey (2003) for more on this.

Some men (almost exclusively men) maintain their association with *pemuda* groups well into their adult years. The term *mahasiswa* refers to university students exclusively. High school students are categorised as *remaja* (adolescent). There is no expectation of political activism for this group. See Chapter Five for an example of how careful Mas Wiryo from COP was to avoid including high school students in activism.
that before the New Order\textsuperscript{15}, the idea of the university student as an important political actor was rare, and it was the regime that produced the student activists.

It is not simply that some students felt motivated to oppose the New Order regime; that much is obvious. More fundamentally, the idea that they should do so as students and not as members of some other category was a product of that regime, its history, structure, and ideas. (Aspinall, 2012:156)

The narrative of pemuda and mahasiswa provided a space and expectation for university students to be politically active in times of crisis. The colonial state and New Order regime (with the financial crisis of 1997-98) provided the incentive for action and university students were looked to by the wider community to play the role of political activists.\textsuperscript{16} The mobilisation of university students was, at least in part, due to the repression that they had experienced under the New Order regime (Aspinall, 2012). It is important to note that being a youth activist in Java did not mean that these young people were exempt from the cultural expectations around respect. In fact, it may be argued that mahasiswa were demonstrating rukun and sungkan by fulfilling their duty as mahasiswa and pemuda according to historical narratives.

Aspinall (2012) suggests that in the post-New Order period, the idea of the university student as an important political actor legacy lingers, but is rapidly losing efficacy. This may be attributed to the social, political and religious lines that Aspinall describes as cleaving Indonesia. During my field research, various COP activists described how their families were accepting of their activism whilst they were at university, but there was an expectation that they would stop their activism and find a ‘good’ job once they graduated. Similarly, students in years 10 and 11 (remaja) were encouraged (or mandated) to participate in EE programs in the schools I researched, but once they reached year 12 they were discouraged and prevented from participating (more on this in following chapters). Students are permitted to participate at certain ages, but because the focus is on acting in the interests of the community and not to follow one’s own desires, interests or strengths, there is an expectation that students will cease involvement (in political protest or EE programs) once they have graduated from that stage. In the case of the EE students, their participation is not expected to be transformative. In describing the urban poor in his studies in Yogyakarta, Guinness (2009:238) notes that ‘participation

\textsuperscript{15} The New Order is the name given to the period in which Suharto was president (1966-1998).
\textsuperscript{16} While students led protests against Suharto, it is important to note that it was economic crisis that led to Suharto’s downfall (Lee, 2011).
becomes transformative only when changes in the wider society allow it’. The same can be said of student participation – both in EE and in political protest.

**Civil servants**

Koentjaraningrat (1988 [1969]) wrote about the Indonesian mentality and development with particular focus on the Javanese. While there have been significant changes to the socio-economic structure of Javanese society since the original paper was published, many of the underlying beliefs and views regarding development (or change) are still evident in Javanese society today. He described the ‘civil servant mentality’ (*mentalitas priyayi*) which has been noted by others studying education in Indonesia (Bjork, 2005, 2013; Raihani, 2007) and is used in this thesis to describe the ‘mindset’ that some teachers have with regard to their profession. In Indonesia, most teachers are civil servants. Generally, this ‘civil servant mentality’ means that a teacher is not focused or motivated by their job as an educator, but in order to achieve higher rank in the civil service and acquire more ‘symbols’ (a big house, ostentatious decorations, the title of haji (which requires an expensive pilgrimage to Mecca)) with as little effort as possible. Koentjaraningrat (1988 [1969]) argued that this attitude leads to a lesser concern for quality within one’s work and reduces creativity. Djajadiningrat-Nieuwenhuis (1987:47) describes the style of Javanese government as giving the impression of a minimum of effort. This was indeed the impression given by many teachers whom I observed during my field research.

Koentjaraningrat (1988 [1969]) describes many Javanese values that, in varying degrees, are evident in the general apathy towards the natural environment and a lack of willingness to take action. He describes a ‘significant time dimension’ which leads to a focus on the present with no consideration for the future, the glorification of the past and the importance of conforming and not outdoing others. These values, combined with rapid ‘development’ and a lack of enforcement around environmental protection laws, have seen Indonesia’s natural environment devastated in recent decades.

**Indonesia and the natural environment**

Indonesia is the site of some of the world’s most striking and important eco-systems: the Bornean (Kalimantan) and Sumatran rainforests, the coral triangle, wetlands and marine and coastal eco-systems. These places are home to many endangered and critically endangered species. While Indonesia’s natural environment is well known on the world stage, it is often in the world media for negative reasons. Indonesia is notorious for its burning seasons. Each year large areas of rainforests

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17 The word ‘mindset’ has become ubiquitous in Indonesia and was used by teachers in various interviews and conversations in this research project.
in Sumatra and Kalimantan go up in flames as illegal burning occurs. There are various reasons for the burning, but most often the fires are to clear land for plantations and, in particular, palm oil plantations. Palm oil plantations can last as long as 25-30 years, but are often abandoned sooner due to low yields, prompting palm oil companies to expand their plantation boundaries and seek new, fertile grounds (encroachment) to meet the increasing demand of the growing industry (Rianto, 2010; Verheye, 2010). Clearing rainforest with machinery is time consuming, expensive and highly visible, making it difficult to clear virgin forest. Farmers and local people are often paid to start fires that will clear forest areas in very short periods of time. It is very difficult for authorities and NGOs to trace these fires back to palm oil companies, and the fires are impossible to contain, resulting in forest fires burning until the monsoon rains come. In some regions the smoke continues after the monsoon rains, with the peat soil smouldering year long. The impact of the carbon released from burning peat soils is alarming and has global implications (Stichnothe & Schuchardt, 2011).

Companies are limited to between 20,000 hectares per province and 100,000 hectares in total for palm oil plantations (Rianto, 2010). These limitations are in place in an effort to conserve rainforest, national parks and the homelands of indigenous peoples. Between the years 2000 and 2009, the area of palm oil plantations in Indonesia grew at an average rate of 10 percent per year, or 3.4 million hectares in 10 years, with an increase in palm oil production of 17.4 percent per annum, placing Indonesia among the top three largest emitters of greenhouse gases in the world due to land use change and deforestation (Rianto, 2010; Stichnothe & Schuchardt, 2011). In April 2016, President Jokowi declared a moratorium on new oil palm and mining permits, freezing the issuing of permits in a concerted effort to prevent any repetition of the disastrous forest fires of 2015 which resulted in half a million Indonesians being diagnosed with respiratory ailments and more than 2.6 million hectares of land burned (Jacobson, 2016). In theory, the moratorium buys the government time to review current and proposed permits but there are reports of bupati (District Heads) continuing to issue permits. In addition to freezing the issuing of permits, President Jokowi is encouraging palm oil companies to improve their productivity, suggesting that yields from current plantations could be doubled, with improved productivity, as seen in Malaysia (Chan & Soeriaatmadja, 2016). While President Jokowi, the relevant ministries and the Crime and Corruption Commission (Komisi Pemberantusan Korupsi, KPK) are working to clean up the palm oil industry, decentralisation of government means that regional governments often flout national policies, and opportunities for corruption at the regional level are rife ("Indonesia refuses palm oil permits in anti-haze push," 2016; 18 This does not take into account the number of Singaporean or Malaysian people who suffered respiratory problems as a result of the smoke from the fires, or the impact on education as schools across parts of Indonesia, Malaysia and Singapore were forced to close due to the smoke.

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While forest fires might be Indonesia’s most notorious problem, they are among many: plastic-filled waves washing up on beaches, waterways too polluted to support life, flooded cities across the archipelago, air pollution, mudslides, landslides and flooding rivers as the result of large-scale illegal logging, a drying climate with water shortages, loss of species and biodiversity and mountains of waste in landfill (with little regard for toxic waste).

In 1990 Indonesia signed and ratified the UN Convention on the Rights of the Child (United Nations, 2017). Under Article 24 of the Convention (Unicef, n.d.), children are afforded the right to ‘a clean and safe environment’. Article 29 stipulates that their education should help them to ‘learn to live peacefully, protect the environment and respect other people’ (my italics). For many of Indonesia’s children, these rights have yet to become a reality in their daily lives.

Colombijn (1998) presents the argument that at the root of almost every environmental problem in Indonesia is a social conflict: citizens against the government, the poor against big entrepreneurs, local people against government protégées. While Colombijn’s observations were made 20 years ago, struggles between these groups are on-going. Colombijn (1998) argued that the state resorted to technical solutions for ecological problems. Ecological problems, however, are complex and intertwined with history and culture. Indonesia has a colonial history and endured 30 years under an authoritarian regime. The last 20 years have seen vast changes in Indonesia’s government structures, with decentralisation and truer democratic processes. These changes have been positive in most regards but despite the efforts of the national government and KPK, decentralisation has fostered corruption and nepotism at devolved levels, rendering national and international protections and commitments to environmental conservation and protection weak, if not useless (McCarthy & Robinson 2016; Setiawan & Hadi 2007). Indonesia has seen an increase in religious devotion in the post-Suharto period, which may contribute to an acceptance of ecological problems as “God’s will”. This, combined with certain values described above (for Java), culminate in a lack of personal responsibility for the natural environment and little pressure on government to act for the environment.

19 The Child Friendly Language version is referenced here.
20 Colombijn’s (1998) article was written during the New Order period in Indonesia, when scholars often wrote about Indonesia in terms of state versus society. In the current democracy, this divide is not as common.
Education in Indonesia

During the colonial period, education was the pathway through which native Indonesians sought to place themselves on an equal footing with their Dutch colonisers. Later, education was the foundation for building the Indonesian nation. Even today, a well-educated person is respected for his or her assumed knowledge and wisdom. The most commonly recommended remedy for widespread corruption and cronyism in the country is inevitably education. In other words, education is regarded as a social ‘good’ in itself. Education is understood as not only cultural capital that connotes the productive and authoritative citizen, but represents a means of ensuring ethical practice, order, harmony and consensus through the getting of knowledge and wisdom (Nilan, Parker, Bennett, & Robinson, 2011:714).

Despite education enjoying high symbolic value (Jackson & Parker, 2008), the education system in Indonesia still performs considerably lower than its neighbours in international testing for Science, Mathematics and Reading. In the period from 2000-2015, Indonesia performed below the OECD average, below Thailand and far below Vietnam in all three subjects (Organisation for Economic Co-operation and Development (OECD), 2017). Since 2006 Indonesia has made no improvement in Reading or Science and has only showed some minor improvement in Mathematics (OECD, 2017). While concern with Indonesia’s poor performance in international tests is frequently mentioned in government documents, the 2013 Curriculum does not address these weaknesses (Parker, 2016).

Levels of enrolment and participation in formal education are very high in Indonesia and have continued to rise in the recent past. Virtually all children attend primary school and most attend high school. According to UNESCO’s statistics, 75.52 percent of secondary-school-aged children were enrolled in 2015 (UNESCO Institute for Statistics, 2017). In 2017, 71.2 per cent of young people aged 16–18 (senior high school age) attend school (UNESCO Institute for Statistics, 2017).

Despite many changes to the Indonesian education system over the past 20 years, there remains a focus on testing, measuring, ranking and reporting numbers (Parker & Nilan, 2013; Parker & Raihani, 2011). The increasing focus on measuring, ranking and auditing performance – the expansion of an audit culture across education and government – is not unique to Indonesia (see Shore and Wright 21

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21 This number is the net enrolment ratio. The gross enrolment ratio was 85.84%. Female students have a slightly higher rate of enrolment than males in this age group. ‘Secondary school age’ includes junior high and senior high school.
(2015a, 2015b); Strathern (2003)). However, the reliance on measuring, ranking and reporting numbers is well suited to Indonesia.

Structure of formal schooling

The Indonesian education system is divided into primary school (Sekolah Dasar [SD]), junior high school (Sekolah Menengah Pertama [SMP]) and senior high school. There are three basic types of senior high schools: general (Sekolah Menengah Atas [SMA]), vocational (Sekolah Menengah Kejuruan [SMK]) and religious schools, with private and state schools in each of these three categories. At the senior high school level the absolute number of students in private schools is greater than the number in state schools which is contrary to the lower years where state schools have greater numbers (Parker & Nilan, 2013:79-80). There are many more SMA than SMK, and SMA are considered more academically reputable. All schools, including state schools, could be considered religious, as all citizens in Indonesia must have a religion; religion is explicitly taught as a subject in all schools. While the majority of schools (Non-Islamic religious, state and private) are under the jurisdiction of the Ministry of Education and Culture (MOEC), some state and private Islamic schools are administered by the Ministry of Religion. These schools have 70% of the same curriculum and have additional religious curriculum. State Islamic day schools (Madrasah Aliyah Negeri, or madrasah) are one such type of school.

Curriculum

When I began my field research for this thesis, schools were all using the newly introduced 2013 Curriculum. The 2013 Curriculum aimed to shift towards a more student-centred approach, using competence-based assessment that was supposed to take into account attitudes, knowledge, and skills based on the learning process and learning results (Retnawati, Hadi, & Nugraha, 2016). Teachers struggled with how to teach the new curriculum, how to assess it, and how to allocate marks. Parents also struggled to understand the new approach. Approximately half way through my fieldwork (three quarters of the way through the academic year), schools were instructed to revert to the 2006 Curriculum (Kurikulum Tingkat Satuan Pendidikan, (KTSP)) on the grounds that many teachers had not had sufficient training and were struggling with the new curriculum. One of “my” schools (SMA) in Yogyakarta reverted, and the other (a madrasah) continued with the 2013 Curriculum. While this proved a stressful time for schools, it was an excellent opportunity for me to see firsthand the challenges of a national education system that is trying to improve and develop, but is constrained by
its own size and the education levels and experiences of its teachers and administrators. It is expected that all schools will convert to the 2013 Curriculum by 2019.

This thesis focuses exclusively on senior high schools for reasons outlined in the Methodology chapter. In senior high school under the 2013 Curriculum, students are divided into three streams - Mathematics and Natural Science, Social Science, or Languages and Culture. This means that from year 10 onwards, students are restricted to subjects that fall within their stream. For example, a student in the Mathematics and Natural Sciences stream cannot study Geography, and a student in the Languages and Culture stream cannot study Biology. Mathematics and Science are held in higher esteem than Social Science or Languages and Culture, resulting in parents and schools pushing students into the Mathematics and Natural Science stream where possible. Students are limited to a narrow array of subjects in their senior school years as a result of these streams. There is very little opportunity for students to be exposed to environmental content in any stream, and opportunities are scarcer if they are in the Language and Culture stream. Students in the Social Science stream should cover some environmental themes in Geography (Parker, 2016).

**Teachers and teaching**

Teacher quality is still a matter of serious concern in Indonesia. Suryahadi and Sambodho (2013) describe various issues that contribute to the low standard of teaching. These include issues with lack of training and education (with many teachers not having tertiary qualifications), oversupply of teachers (associated with central funding and regional level corruption), low salaries, absenteeism, civil service status and the rewards that accompany being a civil servant. Suryahadi and Sambodho (2013) argue that these problems are exacerbated by inadequate pre-service training and a weak performance assessment system for teachers. While the Ministry of Education and Culture is working to address all of these issues (Bjork, 2013; Raihani, 2007), and there appear to have been some improvements, they all remain as issues, even more so in Indonesia’s eastern islands and in rural settings. While I feel uncomfortable making generalisations about Indonesian teachers (as I met a few who were exceptions to the norm), it is important to be clear for any reader who is unfamiliar with the Indonesian education system that ideas around what it means to be a teacher cannot be assumed to be universal.

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22 It is very common for high schools and university students to study a stream or course because they achieved the marks to get into it and not because they want to pursue a career in that area.
Bjork (2013:54) describes what he sees as fundamental differences in beliefs about what it means to be a good teacher in Indonesia compared to ‘Western developed countries’:

The definition of the teacher in Indonesia has been constructed to fit the unique contours of the nation’s social, historical and political landscape. Stress on teachers’ membership in a national civil service corps combined with the government’s historical concern with national cohesion encourages Indonesian educators to act in ways that might not be rewarded in other contexts. As civil servants, they have learned to follow the directives of upper-level officials, and not to dispute them. The image of the instructor as ‘autonomous educator’ or ‘student advocate’ was foreign to most of the teachers I interviewed.

Researchers who have spent time in Indonesian classrooms all report reliance on textbooks by teachers, most often with the teacher reading directly from the textbook or lecturing for the majority of the lesson and having students complete some basic comprehension questions (Bjork, 2005, 2013; Kusmawan, 2007; Kusmawan et al., 2009; Parker, 2002; Raihani, 2012). Despite the Ministry of Education and Culture’s aspirations for teachers to use more student-centred pedagogies and production of documents outlining this (Bjork, 2013; Raihani, 2007; Retnawati et al., 2016), most teachers are not trained or experienced in student-centred teaching methods and are therefore incapable of teaching in this way (Bjork, 2013; Raihani, 2012; Retnawati et al., 2016).

**Culture and education**

Schools-based EE cannot be separated from the education system in which it lies, and education systems are an important reproducer of culture (Bourdieu, 1977b; Bruner, 1996). In his book, *The Culture of Education*, Bruner (1996) concluded that ‘to take a cultural view of education does not really require constant cultural comparison. Rather, it requires that one consider education and school learning in their situated, cultural context’ (Bruner, 1996:X). This is what Bruner attempted to do, and that is what this thesis does. This thesis therefore considers the formal school system in Indonesia, and the complexities of trying to introduce a global approach to EE in a context where local culture and tradition are strongly upheld by the community. Bourdieu’s theoretical concepts were developed largely through his work on education and have been applied extensively to education by others, but less so to EE and not at all to EE in the Indonesian context.\(^{23}\) In order to contribute to a broader

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understanding of EE in the Indonesian context, Bourdieusian concepts are applied throughout this thesis, by way of introduction in this chapter and then integrated with ethnographic data in following chapters.

Bourdieu was a sociologist of education. His work was based on research and experiences in Algeria and France and was seeking to explain how education reproduces society and culture. I deploy three of Bourdieu’s concepts to interrogate and enrich description of some of the main themes that are developed throughout the thesis: capital, habitus and symbolic violence.

Capital

Bourdieu (1986:241) describes his concept of capital as accumulated labour (in its material form) which enables individuals to appropriate social energy. He describes three main types of capital: cultural capital, social capital and economic capital (Bourdieu, 1986). Within these types, he also offers subtypes. Cultural capital is largely related to education and can exist in three forms: the embodied state (the way one thinks, or ‘dispositions of the mind’), the objectified state (educational assets or ‘cultural goods’ such as books, computers, instruments) and the institutional state (educational qualifications) (Bourdieu, 1986:243). Social capital represents the collective result of relationships and social networks. Bourdieu describes social capital as ‘the aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition’ (Bourdieu, 1986:248). Economic capital refers to financial assets, money and property. Symbolic capital is used by Bourdieu (Bourdieu, 1986, 1989) as the term for the form that the three main types of capital assume when they are perceived and recognised as legitimate. The structure of an individual’s symbolic capital depends on the relative weight of their different types of capital within the total volume of their capital; this, in turn, dictates where they sit in the social space (Bourdieu, 1989). All three forms of capital are related, and the more one possesses of any of them, the easier it is to accumulate the others and to secure symbolic capital. However, an individual is most likely to have proportionate amounts of each, as it is difficult to accumulate one without the others. For example, it is difficult to accumulate wealth with little education and few social connections, just as it is difficult to attain high levels of education without sufficient wealth and social networks to support the pursuit of higher learning. It is possible, however, for one form of capital to be transformed into another. For example, social connections can offer business or employment

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Brazilian public policy context; and Nugent and Beames (2015) in the Finnish and Scottish early childhood contexts.
opportunities that translate into wealth (economic capital). Cultural capital, for example, high educational qualifications, can also lead to economic capital in the same way.

The structure and distribution of capital represent the ‘immanent structure of the social world’ (Bourdieu, 1986:242). By being inscribed into the objectivity of things, capital ensures that everything is ‘equally and not equally possible or impossible’, meaning that capital, in its various forms, provides for or hinders movement within social structures. Its ability to provide and hinder is often invisible, as individuals (agents) incorrectly assume everyone to be equal and believe that social movement is a result of attributes such as hard work and intelligence.

Indonesia is an economically emerging nation and the current generation is the most highly educated in Indonesia’s history (Nilan et al., 2011). Education is a rich source of capital in Indonesia – arguably more so than in Global North countries where there are opportunities to gain economic capital through different means. For example, a young person in Australia can leave secondary school, pursue a vocational course and an apprenticeship, build a financially sound business and acquire significant economic capital – enough to send their children to private schools, if they so choose. This can be, and often is, achieved without obtaining a tertiary education. This is not the case in Indonesia, where tradespeople generally work in manual labour as an ‘unskilled’ tradesperson, being paid the lowest of wages (often below minimum wage, even after many years of working), and there is little opportunity to acquire any notable capital – cultural, social or economic. As described in the section on Education in Indonesia, education is seen as the path to wisdom and wealth to an extent not seen in Global North societies. Families of modest means go to great lengths to have their children educated to the highest level possible, even when job opportunities remain scarce despite their higher level of education (Schut, 2016).

Within the Indonesian education system, like most others, there is inequality, and this system reproduces inequality. This thesis focuses exclusively on senior high schools. The quality of education differs from one school to another, which is not unique to Indonesia. The difference in quality is amplified in rural and remote areas. The general trend is that the further east from Java a community is, the lower the quality of education (and other government services) they receive. While there are some very good government and private schools across Java, very few students of low socio-economic means are accepted in these schools. Students require both economic and cultural capital to be accepted in these senior high schools. Students of low economic and social capital generally attend lower achieving primary and junior high schools, which, in turn, contributes to their lack of cultural
capital, further reducing their opportunities to gain entry to the higher achieving senior high schools. Once in senior high school, the inequality continues to grow, due to a lack of economic capital for school fees, extra-curricular tutoring, access to the internet, smart phone, computers and books which are all important avenues to increasing one’s cultural capital. This cycle of disadvantage in the education system is what Bourdieu (1974:35) refers to as ‘cumulative handicaps’. While Bourdieu’s work was based on French and Algerian societies, his concepts are applicable to the Indonesian context.

Schools, parents and students in Indonesia understand the economic and cultural value of education. They also understand their own economic, cultural and social limitations. Chapters Five and Six of this thesis detail how EE programs offer a level of prestige to under-achieving schools, students and teachers for ‘environmental winning’ in the forms of what Bourdieu refers to as ‘objectified cultural capital’—prizes, trophies, rewards, titles, and ultimately, the opportunity to travel to Australia.

According to Bourdieu (1986:254), the more the official transmission of capital is prevented or hindered, the more the effects of the clandestine circulation of capital in the form of cultural capital determine the reproduction of the social structure. Chapter Five highlights the reluctance of the Office of Education, Youth and Sport to grant the officials from the Adiwiyata Program (national environmental education program) from the Environment Agency (at the district level) access to schools in any formal or official manner. By doing this, they are preventing or hindering the circulation of capital. The Adiwiyata Program cannot achieve the same levels of prestige (through attainment of cultural capital) as other academic programs or competitions, such as science and math Olympiads, and is still seen as a distraction (or risk of loss of potential cultural capital) for year 12 students, who are not permitted to participate in any of the EE programs described in this thesis.

Chapter Six portrays how Mas Rudi, the leader of the Surabayan NGO, Green Action, astutely develops and relies upon social capital, in the form of relationships with wealthy donors and government officials, to develop economic and cultural capital for the Eco Schools program. This capital (usually in the form of objectified capital) is then offered as a prize (explicitly or implicitly) to principals, teachers and students who participate in the program and its many varied competitions. While he is not of the

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24 Most students have access to their subject textbook, but beyond that non-fiction books are particularly difficult to access in Indonesia. In most places there are no public libraries, and school libraries, if they exist, are often very bare.

25 The Ministry of Education and Culture is the title for the national level. It is known as the Office of Education, Youth and Sport (Dinas Pendidikan, Pemuda dan Olahraga) at the regional level for Yogyakarta (DIY) and Education Office (Dinas Pendidikan) in Surabaya.
same social group as the government officials and sponsors, Mas Rudi is persistent in his efforts to
develop his capital (and that of Green Action) and have it recognised and legitimised by them,
therefore seeing the development of symbolic capital. This symbolic capital then puts Mas Rudi in a
position to offer other types of capital to the participants of the Eco Schools programs. For reasons
explored in Chapter Six, the capital that Green Action offers to participants does not and cannot match
the capital of academic programs and competitions.

Habitus and symbolic violence

Between the child and the world the whole group intervenes..., with a whole universe of
ritual practices and also of discourses, sayings, proverbs, all structured in concordance
with the principles of the corresponding habitus. (Bourdieu, 1977a:167)

‘Habitus’ can be understood as a system of durable, transportable dispositions that have developed
in the individual as a result of social structure, systems and inculcation. Bourdieu (1977a) argues that
the habitus is developed as a result of inculcation and appropriation. While an individual’s habitus is
moulded by the social structures and cultural systems, their practice of their dispositions in turn
reinforces the habitus of other members of the group, creating a collective culture that is
strengthened by reduplication in institutions (such as schools). According to Bourdieu (1977a:78), the
practices (behaviours) that result from the habitus can only be accounted for by the objective
structure defining the social conditions of the habitus and ‘short of a radical transformation,
represents a particular state of this structure’.

‘Symbolic violence’ is used to describe how institutions, such as schools, governments and NGOs, can
impose a situation on a group or individual such that the group or individual complies, often unaware
of the imposition, accepting it as self-evident (Bourdieu, 1977a; Bourdieu & Wacquant, 1992).
Symbolic violence is applied in later chapters to understand the acceptance of roles, inclusion and
exclusion of certain groups within EE and the mandatory participation in EE in attempts (by Green
Action and the Surabayan government) to develop an environmental habitus in students.26

Bourdieu’s concept of habitus is utilised throughout this thesis to help us understand the implied social
hierarchy of the Javanese, how Javanese students behave according to their position within this

26 Not all education falls into the category of symbolic violence. Education where students are critically
thinking and can make sense of their new learnings does not equate to symbolic violence.
hierarchy and the impact this has on their environmental behaviours (see section on Javanese culture above for more on this). While Bourdieu’s concept of habitus assists with understanding social behaviours at a societal level, it does not account for individual agency and behaviours that occur outside of societal norms. Understanding habitus and the development of behaviours is useful in this study where EE programs are attempting to alter students’ behaviours, making them more environmentally friendly, in a society inculturating very strong social habitus. Essentially, the EE programs are attempting to go against the grain of the habitus of students. Bourdieu (1977a:80) explains that it is the ‘homogeneity of the conditions of existence’ that enable the objective homogenizing of a social group (doxa). While the EE programs in this study were attempting to alter the social structures (conditions of existence) within the schools in order to achieve positive environmental behaviour change and develop an environmental habitus, beyond the school (in the home, the markets and the broader society), the conditions supported different behaviours. This meant that there was not the homogeneity of the conditions of existence required to foster the development of an environmental habitus to develop. In Bourdieusian terms, there was a heterodox environment, rather than a doxic environment. Within some schools there was therefore a reliance on explicit co-ordination (in the form of school rules and mandatory participation). These issues are examined further in the following chapters.

**Conclusion**

This chapter provided background on the Indonesian context, with particular focus on Java and Javanese culture. Literature was used to introduce Indonesia, before focusing on Javanese values related to respect. The historical role of youth activists and the role of the civil servants in Java were included to familiarise the reader with the cultural expectations placed on individuals in these roles. A review of Indonesia’s natural environment and some of its major problems was included before the formal education system was introduced, with consideration of structure, curriculum and teaching. The chapter concluded by focusing on the role of culture in education. This section introduced Bourdieu’s concepts of habitus and capital as concepts that can be applied to understand the social hierarchy of the Javanese and how this hierarchy influences behaviours.

Because ‘culture’ is so important in this study, it is important that the reader is familiar with the context of Indonesia, and has an appreciation for the Javanese values that were found to impact on EE in the ethnographic studies in Yogyakarta and Surabaya. The limitations of space have resulted in a brief introduction to the rich and complex culture of the Javanese people. It is hoped that the introduction provided is sufficient for the reader to appreciate the vast differences in approaches to
education between the schools, ENGOs and educators in this study and those referred to in the literature. The following chapter provides a review of the literature on EE with consideration of the importance of context.
Chapter Three: Environmental education (EE): A review of the literature

Introduction

Literature that considers culture in EE in any context is scarce, and existing literature focuses more on cultural sensitivity within Global North contexts. To date there is a lacuna of published research in English that considers the impact and importance of culture in EE in any context outside of the Global North. While there is no literature available that considers the exact topic of this thesis, my research stretches across disciplines of education, EE and anthropology and thus draws on works from these disciplines to provide a background for my research and to identify the gaps which it seeks to fill. Through considering literature from the Global North and its applicability to the context of this research, the assumed universal applicability of education research is exposed, highlighting the importance of research in contexts outside of the Global North.

This chapter explores what EE is and the complexities and challenges of combining environment and education in the formal education system. The goals, pedagogies and issues associated with EE in senior high schools are presented followed by the globalisation of EE. This chapter exposes the dearth of literature that considers EE outside of the Global North and the lack of consideration given to the impact of culture on EE in the literature.

EE/ESD/EdS

Due to its interdisciplinary nature and gradual emergence as a field, EE is difficult to define. Definitions of EE have evolved as the field has evolved over the past forty years. With the increased urgency for environmental outcomes, there has been an increased call for action and the expansion of conceptual foundations. With new conceptual foundations came a change in language around EE and the introduction of new terms, including Education for Sustainability (EfS) and Education for Sustainable Development (ESD). The term environmental education (EE) is not agreed upon universally. It is often used interchangeably with EfS and ESD. The use of these three terms demonstrates that although there may be a general understanding that these terms refer to education that is for or about the environment, they all can and do mean so much more, depending on how they are being utilised and by whom. Hart (2008:31) suggests that the ‘uneasy tension that was evident in the initial juxtaposition of environmental education and education for sustainable development has abated somewhat as exhaustion in trying to fix their meanings sets in’. The following section provides evidence of the tension that Hart refers to and demonstrates the difficulty in defining such terms.
Environmental education (EE) is the term that was first given to the broad field of education that was for the environment. Since its introduction to the world stage in the 1970s, EE has evolved and developed to include EfS and ESD in some areas. Environmental education has been evolving since its introduction to mainstream education in Global North countries in the 1980s. The focus of EE has been slowly shifting from imparting knowledge of natural ecosystems and the threats posed to them by overuse and depletion of resources, to equipping all people with the knowledge, skills and understanding necessary to make decisions based upon their full environmental, social and economic implications (Australian Government Department of the Environment, Water, Heritage and the Arts, 2009; Cutter-Mackenzie, 2010; Tilbury, Coleman, & Garlick, 2005). This slow shift means that EE is almost undefinable in its content and pedagogy as it has evolved and developed into a very diverse field that includes formal and non-formal education.

Lucas (1979) coined the phrases, education in, for, and about the environment. Education in the environment is a pedagogical technique that refers to education outside of the classroom; education about the environment focuses on knowledge; and education for the environment focuses on enhancing or maintaining the environment (through developing attitudes, skills to contribute to a better natural environment) (Lucas, 1979). These terms are still commonly used to describe different types of EE programs. Lucas argues that EE could be any one of, or a combination of, the three. Linke (1980) argues that basic educational activities and pedagogies are in fact components of EE, but are not in themselves EE. He argues that since the Belgrade Charter (Belgrade Charter, 1975), three basic components of EE have emerged: developing a deeper understanding of the complex and dynamic interrelationships between people and the physical, biological and social environment; maintaining and improving the quality of human life through conservation of the environment; and emphasising positive, individual, and collective action as a means of demonstrating this concern. He argues that EE is ‘all three of these things; it is not, in its own right, any one of them’ (Linke 1980: 20).

How EE evolved (or regressed) from the action-focused definitions of the Tbilisi Declaration of 1978 to a knowledge-based and awareness-raising focus in formal education in the 1980s to a behaviour

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27 The Tbilisi Declaration of 1978 (resulting from the 1977 UNESCO-UNEP Intergovernmental Conference on Environmental Education) is seen as the beginning of the formalisation of EE as a field. Thirty years after its creation, this document still represents a good, inclusive definition of what EE should aim to be.
change focus later is not clear. One can only hypothesise that the incompatibility of action-based learning and teaching pedagogies played a role in this. EE has, in some circles, become a term that held (and may still hold) connotations of ‘doom and gloom’ education. Wals and Jickling (2011) argue that in many cases the term ‘education for sustainability’ (or sustainable development) has replaced the term EE and that many people have been conditioned to believe that the term ‘sustainability’ carries unconditional or positive values. They argue against this move in terminology and reason that ‘environmental issues are not fundamentally or exclusively about sustainability. Rather, they are issues about cultural identities, social and environmental equity, respect, society-nature relationships and tensions between intrinsic and instrumental values’ (Wals & Jickling, 2002:223).

Despite being difficult to define, EE does have characteristics that are commonly acknowledged (although with differing interpretations) in the literature. Stevenson, Brody, Dillon, and Wals (2013:2) identify five characteristics associated with EE: it embraces normative (or value-laden) questions; it is interdisciplinary (people-society-environment); it is concerned not only with knowledge and understanding and attitudes and values, but also with developing the agency of learners in participating and taking action on environmental issues; it takes place in formal, non-formal and informal education settings; and it has both a global and local orientation. These characteristics of EE are some of the most well-considered and all-encompassing in all of the literature on this topic. They do, however, overlook the importance of having access to the natural environment and developing an appreciation and value for it (see section below on connection to the natural environment). They are also placed firmly in the context of the Global North, yet refer to global and local orientation. The focus on ‘developing agency in learners in participating and taking action’ is particularly problematic in the Javanese context, as demonstrated in the following chapters.

ESD

The United Nations Educational, Scientific and Cultural Organization (UNESCO) adopted the term ‘ESD’ and named 2005-2014 The United Nations Decade of Education for Sustainable Development (DESD) (UNESCO, 2005, 2013). UNESCO does not define what ESD is in terms of content or pedagogy, but states that it aims ‘to help people to develop the attitudes, skills, perspectives and knowledge to make informed decisions and act upon them for the benefit of themselves and others, now and in the future. ESD helps the citizens of the world to learn their way to a more sustainable future’ (UNESCO, 2013). This definition implies that people will act for the benefit of themselves and others based on informed decisions brought about by ESD, but makes no mention of the natural environment or its conservation. It fails to acknowledge that ESD will not affect all people equally. It also fails to acknowledge that the
very concept of development is contradictory to concepts of environmental conservation and environmental sustainability. Kopnina (2012) rightly argues that ESD, with its focus on human welfare, equality, rights and fair distribution of resources, is a radical departure from the aim of EE set out by the Belgrade Charter, as well as a distinct turn towards anthropocentric education. It therefore runs the risk of losing the ‘environment’ from EE.

**EfS**

The Australian Research Institute in Education for Sustainability (ARIES) describes the components of EfS as: envisioning a better future; critical thinking and reflection; participation; partnerships for change; and systemic thinking (Australian Government Department of the Environment, Water, Heritage and the Arts, 2009). EfS, like ESD, does not identify the environment as a focus or cause. UNESCO’s, ARIES’s and Stevenson et al’s (2013) definitions of ESD, EfS and EE show many similarities and highlight the overlap between the terms. Tilbury (2004) sees the terms as representing quite distinctively different approaches to education. She describes a ‘clear shift taking place between conservative approaches to informing people and students about the environment (commonly practised as environmental education) towards educating to think more critically and reflectively about change and how to engage in change for sustainability, which underpins ESD approaches’.

Although Tilbury can identify a ‘clear shift’, others in the field appear to have more difficulty identifying and defining the differences between the terms.

In an attempt to address the question, ‘What is the difference between EE and ESD?’ McKeown and Hopkins (2007) suggest that a more appropriate question would be ‘What can this discipline (EE) contribute to ESD?’ (McKeown & Hopkins, 2007:18). McKeown and Hopkins (2007) clarify that despite previously arguing that EE and ESD were distinct yet complementary, they acknowledge that in some regions (including the Asia Pacific and Southern Africa), EE is becoming ESD. They explain that this is not the case in Northern America, where EE is more nature focused (and therefore not likely to become ESD), and in the UK and Ireland, where ESD is organised more around citizenship education. They argue that ESD is not likely to replace EE, but become one of the (important) goals of it. It is important to note that while most articles indicate that EE or ESD is ‘global’ in its aims, there is great variation of aims and definitions, depending on geographical context. Research on differences in EE tends to focus on pedagogies; there is therefore a lack of research that considers geographical and cultural impact on EE. This theme is explored later in this chapter.

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28 ARIES has since changed its name to Australian Research Institute for Environment and Sustainability (ARIES).
The debate around language is largely restricted to academic circles, with little consideration for what these terms mean for educators and students. The literature cited here did not take into account how practitioners and educators use the terms. A. Hill et al. (2014), Jucker (2002) and Prabawa-Sear and Dow (in press) found confusion and uncertainty with sustainability language in schools. Chapter Seven of this thesis explores how sustainability language is filtered down from UNESCO to governments and to practitioners. The practitioners from the Indonesian Environmental Educators’ Network did not find the language important in terms of what they do, but it was important for accessing funding and the term ESD was therefore adopted, without change in approaches.29

It appears that the shift in discourse from EE to ESD is not simply a natural progression of language to accompany changes in pedagogies and practices, or that ‘the language (of EE) has changed as conceptual foundations have expanded’ (P. Hart, 2008:29). Robottom (2013) argues that EE is being aggressively and extensively ‘rebadged’ as ESD and although the shift in discourse from EE is clear in the minds of key participants in the field (such as Tilbury 2004), it is questionable whether contemporary educational practice conducted under the ESD discourse can be differentiated from practices conducted under the EE discourse, especially considering the lack of definition about how educational practice under the ‘new’ discourse of ESD may differ from educational practice established under the ‘old’ discourse of EE (Robottom, 2013:158).

The separation of EE from EfS and ESD may be useful in trying to convey the differences in approaches, but it is divisive in that it splits the field (which is already suffering from an over-supply of terms) and it fails to acknowledge that EE is capable of taking on the characteristics that are attributed to EfS/ESD. Environmental education can and has developed over the past 40 years and can and will continue to develop. It also raises the question – is not all EE for sustainability? Wals and Jickling (2002) argue that we must seek more, not less diversity. This will be achieved when we use less exclusive language to describe our educational activities. In addition to adding unnecessary debate to the field, the tussling over terms has produced confusion and misunderstanding amongst teachers and practitioners with little to no positive influence on how EE is being delivered (Campbell & Robottom, 2008; Robottom, 2013). The use of new terms, I believe, will do little to improve pedagogies and approaches, but will

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go a long way in confusing teachers and practitioners and give the impression that EE is no longer valid.

As noted in the first chapter of this thesis, I chose to use the term environmental education throughout my research and in my writing because EE (pendidikan lingkungan hidup) was the term with which most teachers and students were familiar. Unlike ESD, it is explicit that it is about the environment and does not focus on development and the notion that we should be continually seeking physical development of the natural world. In my writing, this term will encompass any educational activities that are for or about the environment. Where differences in approach are likely to impact on understanding, clarification will be made.

**Goals of EE**

‘While sustainability has clear meaning in particular contexts, as an aim it is dubious’ (Wals & Jickling, 2002:222).

There are currently no clearly defined and universally agreed upon goals, frameworks or methodology in the field of EE. As the field has developed and grown in prominence, there has been an ongoing debate about what EE should be aiming to achieve. This lack of direction has led to criticism of the field (and arguably the development of EfS and ESD), as it is difficult for EE to get where it wants to be if it cannot clearly define where that is. It is largely agreed that EE is for the environment, but what exactly this means is open to interpretation. While this lack of a clear goal appears to be a weakness of EE, it is also considered one of its strengths. The principles of EE support the idea that those in the field would come to their definition and own goals based on local issues.

Hart (2008:28) states that the goal of EE is ‘to empower young people by giving them opportunities to integrate relevant knowledge and skills meaningfully as they participate critically in the activities of the political community’. He argues that teaching and learning are intended as a cooperative process of enquiry and action on real social and environmental issues. While Hart’s views on the goals of EE are inspiring and uplifting when considered within the context of the Global North, they are not culturally acceptable in the context of this study, and in many other Global South communities. Cole (2007) presents the argument that in order to open the field for more diverse, locally appropriate, and inclusive pedagogies, those of us in the field of EE must understand that environmental education’s key concepts of environment and environmental literacy are culturally specific and not universal. There is an unfortunate dearth of discourse and literature that explores culturally sensitive
approaches to empowering young people in EE. This can be in part attributed to the failure of many academics to ‘recognize and deconstruct the White, western values and ideologies that dominate the discourse of environmental literacy’ and to understand and acknowledge that ‘environmental education explicitly promotes and reproduces hierarchical systems of knowledge and excludes multiple ways of knowing and living in the world’ (Cole, 2007:40).

Kopnina (2012) argues for prioritising environment over learner (or individual) rights to determine their own path and environmental action. This is an issue that is explored in the chapter on Surabaya, where mandatory participation in EE is producing sound environmental outcomes, but the education component of EE is failing. Kopnina’s arguments are related to more complex issues around environmental citizenship and raise the question of how EE could or should fit within general education – a theme explored later in this chapter and throughout this thesis.

It appears that there is an assumption made by policy makers, EE advocates and some academics that when it comes to EE, teachers know what to teach, or that students are in a position to identify issues and direct their own learning. In fact, what is most often observed is a focus on environmentally related behaviours within the classroom or school grounds. These often include turning lights off, turning off taps, recycling paper and composting fruit scraps. While this constitutes a form of EE, there is a worrying lack of discussion and learning around the complexities of environmental problems and the interrelationship with economic, political and social dimensions (A. Hill et al., 2014; Kuzich, Taylor, & Taylor, 2015; Redman, 2013). For students in this research project, like many others in urban settings, this was combined with a lack of access to the natural environment, which prevented them from experiencing the beauty of nature and developing a connection to and appreciation for it.

Connection to the natural environment

In the 1970s, Naess (1973) introduced the concepts of deep ecology and the ecological self (or ecological identity) to environmental literature. This identity includes the self, the human and nonhuman community, and the planet’s ecosystems. The argument put forward was that by seeing oneself as part of nature, one is more likely to want to protect it. Nisbet, Zelenski, and Murphy (2009:718) argue that ‘nature relatedness’ (developing appreciation for and understanding of human interconnectedness with all other living things on the earth) may be one way of shrinking the gap between environmental attitudes, knowledge and behaviour and of transforming concern for the

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30 See Bengston, Schermann, Hawj, and Moua (2012); Cole (2007); Mann (2017) for work on culturally sensitive and appropriate EE in North America and South Africa.
environment into environmentally responsible behaviour. Similarly, Schultz (2000) argues that concern for the environment is fundamentally linked to the degree to which people view themselves as part of the natural environment. As evident from the literature cited in the preceding sections, EE often fails to explicitly convey the important role that access to nature or natural environments plays in building a sense of appreciation and value for the natural environment. Because the literature is written in the Global North, based on Global North experiences of education and EE, there is an underlying assumption that EE students will have access to nature. This may be in the form of a local stream or wetland, a piece of bushland near the school or local reserve, or local, regional and national parks. For the students of EE in Surabaya and Yogyakarta, there is very little, if any, opportunity to experience the natural environment. For many Javanese, the ‘natural environment’ is rice fields, or (in Surabaya) a beautifully manicured park where one is prohibited from walking on the grass. Most streams and rivers have had their riverbanks replaced by cement retainers, so even waterways do not present an experience in nature for students.

As described in the following chapters, and seen in the picture below, Surabaya has some free entry parks provided by the Surabayan government. Yogyakarta does not have any.

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31 As described in the following chapters, and seen in the picture below, Surabaya has some free entry parks provided by the Surabayan government. Yogyakarta does not have any.
Pedagogies in EE

There is no widespread agreement upon pedagogy for EE. There is, however, much discussion in the literature about how EE is most effectively delivered in schools. Such literature generally focuses on schools in the Global North and fails to take into account education systems outside of this context. As demonstrated above, it is often argued that EE is most effective when delivered as part of a whole school, cross-curricular approach that is in the environment (rather than about the environment – taught in a classroom or textbook), for the environment (attitudinally, skills wise or politically), and experiential (hands on). Stern, Powell, and Hill (2013) list 12 characteristics that they consider to be
generally agreed upon as part of a ‘best practice’ approach to EE. These characteristics were collated from numerous sources including the Excellence in Environmental Education: Guidelines for Learning (K-12) developed by the North American Association for Environmental Education (2012) and include: active participation, hands-on observation and discovery, place-based learning, project-based learning, cooperative/group learning, play-based learning, outdoor instruction, investigation, guided inquiry, pure inquiry, data collection, immersive field investigation, relevance, reflection, issue-based learning, learner-centred instruction, multimodal delivery of content, and multiple points of view.

In Global North education systems, these characteristics are generally considered the preferred approach to school-based delivery of EE both in the classroom and as extra-curricular activities (Cutter-Mackenzie, 2010; Ferreira, Ryan, & Tilbury, 2006; Powers, 2004; Steele, 2011; Tilbury et al., 2005). There is a lack of literature that considers whether these approaches result in more favourable environmental outcomes and whether they could or should be used in diverse contexts such as Global South societies with different education systems, aims and expectations around what education is and should be aiming for. The majority of research and literature on EE focuses on primary school EE, with significantly less consideration given to the challenges of including EE in secondary schools (Pepper & Wildy, 2008).

The differing approaches to EE may be attributed to a variety of factors. These factors include: limited teacher professional development or training in EE, teachers lacking understanding of principles and approaches to effective EE, teachers being influenced by their own subject traditions and teachers not feeling supported by the school or parent group to take on environmental projects (Barrett et al., 2005; Borg, Gericke, Höglund, & Bergman, 2012; Spiropoulou, Antonakaki, Kontaxaki, & Bouras, 2007). Borg et al argue that the way that a teacher understands and conceptualises EE has consequences for how they incorporate it into their teaching, and many teachers are influenced by their own subject traditions (Borg et al., 2012).

Environmental education is an ever-evolving field of education that is not extensively covered in pre-service or in-service training in many places, so it is not surprising that many teachers struggle to conceptualise and incorporate it in their teaching (Ferreira et al., 2006; Mokhele & Jita, 2008; Wade, 1996). This situation, combined with its complexity in dealing with social and environmental values and environmental conservation in the face of a growing sense of urgency for action, has seen a variety of pedagogies and programs employed that have focused on knowledge transfer or behaviour alteration. Where a behavioural approach focuses on (often prescribed) behaviour such as recycling
or not littering, EE should include more holistic approaches which are interdisciplinary, enquiry- and outcome-focused, community-based, participatory, action-oriented and normative (or value-laden) (P. Hart, 2008; Stevenson, Wals, Dillon, & Brody, 2013). These more holistic approaches are said to develop agency in learners, which can guide their decisions and actions now and in the future (Stevenson, Wals, et al., 2013). Such approaches may be considered to be a part of what Rexhepi and Torres (2011:684) term a ‘Reimagined Critical Theory’, which would ‘herald a liberatory education that empowers stakeholders, fosters curiosity and critical thinking, and provides a means for crucial successful bottom-up, top-down engagement in the political arena’. The question remains unanswered in the literature of what approaches could be used effectively in contexts such as Indonesia, where it is neither appropriate nor likely that EE will empower learners, be inter-disciplinary and outcome-focused, community-based, participatory, action-oriented and normative (or value-laden). Chapter Seven offers a model for EE suited to Indonesia.

There is a plethora of literature that critiques approaches to EE in school and calls into question its effectiveness (P. Hart, 2008; Jucker, 2002; Stevenson, 2007). Colwell (1976) was one of the earliest critics of the behavioural approach to EE. He argued that its weakness lies in the predetermined behavioural objectives being set before the learning activities which are designed to realise them. He acknowledged that this largely occurs in order to meet the needs of evaluation imposed on EE. He described behavioural objectivism as ‘condescending to both students and teachers in its implicit denial of their ability to learn independently of imposed objectives’ (Colwell, 1976:70). Colwell (1976) described behavioural objectivism as ‘an ill-conceived combination of notions and assumptions that are both confused and questionable in themselves, and as a whole involve basic incompatibilities which, when looked at functionally, may do more to impede environmental education than to aid it’ (Colwell, 1976:66). His main criticism lay in the attempted combination of what he considered incompatible theories of education – inquiry and impartation of knowledge – where goal determination is removed from the natural process of inquiring and students have a limited opportunity to clarify their own values as distinguished from those which are contained in the behavioural objectives. The issue of imposed objectives is still relevant in EE, particularly in secondary education where curriculum outcomes and exams largely dictate content, approach and objectives of EE.

Like Colwel (1976), P. Hart (2008) is a critic of this approach to EE which favours imparting of knowledge and predetermined outcomes. He argues that “[w]e want to speak and write in ways that make people think about human-environment relationships, yet we educate them as if they cannot
think’ (P. Hart, 2008:32). Stevenson (2007) is another voice in the critique of traditional pedagogies used in EE. Stevenson refers to the work of Young (1980) and Simon (1973) in describing the teacher as a *dispenser of knowledge* and (frequently) the only participant who actively engages in higher-order thinking processes. He argues that, characteristically, student thinking is confined to applying factual information to familiar ‘well-structured’ problems that have a pre-determined, single correct solution. Stevenson argues that the acquisition of knowledge is for future use. In the current education system, tests of students’ thinking occur in written examinations on theoretical material which is usually far removed from the realm of the students’ present or future life experiences (Stevenson, 2007), denying the students the opportunity to apply their knowledge in any meaningful way. With so many prominent thinkers in the field of EE critiquing the most commonly used approaches, we must question why these approaches continue to dominate EE in schools. Barrett et al. (2005) argue that tradition and cultural narratives about teaching, learning and what constitutes legitimate knowledge are embedded within the education system and curricular learning objectives. This, combined with a long history of definition of teachers as providers and students as recipients of knowledge, culminates in EE being wedged in a system that does not serve its purposes.

EE in general education

Early discussions of EE theorised and attempted to define not only what EE is and what it should aim to achieve, but also how to evaluate its effectiveness in achieving these goals (A. Gough, 2013). The ultimate goal was often identified as behaviour related (Asch & Shore, 1975; Hungerford & Volk, 1990; Lucas, 1980; Ramsey & Hungerford, 1989; Sivek & Hungerford, 1990). Others, such as Colwell (1976), Hart (2008), Gruenewald (2004) and Stevenson (2007), rejected this focus and called into question whether such an approach belonged in the education system. Gruenewald (2004:71) argues that the institutionalisation of EE within general education has muted its potential as a transformative educational discourse and works against its own socially and ecologically transformative goals. He suggests that EE works to legitimise and reinforce problematic trends in general education and tends to neglect the social, economic, political, and deeper cultural aspects of ecological problems. Gruenewald argues that, ultimately, efforts to integrate EE into schools are ‘dwarfed by the power of the dominant educational discourse, which serves different, arguably anti-environmental, ends’ (Gruenewald, 2004:74).

While Gruenewald’s (2004) concern was with the institutionalisation of EE, Barrett et al. (2005) highlight the mismatch between the traditional roles of teacher and student and the expectation that these can be overcome in EE. They write that the ‘roles of powerful teacher and submissive student
carry both the authority of law and the weight of tradition, despite educational theory and educational practice purporting a counter theme of independent learning and critical and creative thinking’ (Barrett et al., 2005:511). As demonstrated in the section on Education in Indonesia, the Ministry of Education and Culture aspires to have more student-centred pedagogies used in Indonesian schools, but the combination of tradition, culture and a lack of teacher training in the techniques has led to very little progress in this area.

Barrett et al. (2005) note that even when the teachers in their study expressed a desire to relinquish more control to students, they often had difficulty doing so. Stevenson (2007) examined the contrast between the socially critical and political action goals of environmental education and the uncritical role of schooling in maintaining the present social order. He found that the educational ideals of engaging students in ideological and critical inquiry conflicted with the dominant practices in schools ‘which emphasise the passive assimilation and reproduction of simplistic factual knowledge and an unproblematic “truth”’ (Stevenson, 2007:139). Even the simplest ‘truths’ in EE are complex, as they cannot be separated from social, political and economic issues. A simple example is the “good” environmental behaviour of recycling. Most students in the Global North are taught to recycle. Clearly, recycling is better than not recycling (unproblematic truth), but critical questioning of consumption behaviours, and the environmental, political and economic impact of recycling (compared to avoiding, reducing or re-using) are arguably more important and meaningful learning opportunities for students.

The works of Barrett et al. (2005), Colwell (1976), Gruenewald (2004), P. Hart (2008) and Stevenson (2007) raise important questions about the contradiction of ideologies in the environmental movement and formal education. They highlight the focus on dispersion of knowledge and assessment in schools and how they are prioritised above all else. This focus, combined with the ‘unproblematic “truth”’ that Stevenson (2007) refers to, leads to questions of an individual’s right to engage in environmental behaviours of their choosing, be they negative or positive. Students are often denied the opportunity to identify and define environmental issues and, in turn, are denied the opportunity to engage in positive environmental behaviours at school. A lack of educational opportunity, combined with a lack of infrastructure and the weight of tradition in education culture, results in the passive assimilation and reproduction of simplistic factual knowledge and an unproblematic “truth” that Stevenson (2007) describes. This situation lends itself to the question of the role of environmental citizenship in society and within the formal education system. Is it the role of an education system to develop environmental citizens? I argue that it is. Education systems aim to develop good citizens. The
natural environment is important to all citizens, and all citizens play an active role in the state of the natural environment. With the state of the natural environment as it is, with problems so dire, I believe that environmental citizenship should find its place as a part of EE in education systems. I acknowledge that education, no matter how good, cannot do the job of politics (Jucker, 2002). Like Jucker, I argue that there is a need for action at the political level. The assumption that EE can solve environmental problems without political action is ‘both horribly naive and utterly unfair on the younger generation’ (Jucker, 2002:9).

These issues are ultimately linked to the (socially constructed) importance of the natural environment and the question of whether the health of the natural environment should prevail over the desire of individuals, society, governments and industries for lifestyles and accumulation of wealth that rely on destructive environmental behaviours. I argue that, considering the current state and scientific evidence suggesting that the state of the global natural environment will continue to deteriorate if large scale changes are not made, there is an urgency to act, and every political and educational system should play its role in bringing about positive change.

A whole-school, cross-curricula approach

The Decade for Education for Sustainable Development (DESD) made calls for sustainability to be embedded across curricula (Dyment, Hill, & Emery, 2015). In many countries, including Indonesia, this was the impetus for the introduction of EE. In countries that already had EE, the focus was to move away from the delivery of EE as a science or society-and-environment topic to embedding sustainability education and practice through a cross-curricular, whole school approach (Cutter-Mackenzie, 2010; A. Hill et al., 2014; Sterling, 2010; Tilbury et al., 2005). A whole school approach to sustainability requires schools to address a range of complex and diverse issues such as school governance, pedagogy, resource consumption, community outreach and curriculum development across all year levels at the school (Ferreira et al., 2006). A cross-curricular approach requires a high level of planning to embed a topic or priority into all subject areas. While the concept of cross-curricular inclusion is enticing, there are risks and challenges associated with this approach, all of which were evident in the Yogyakartan schools in my research.

Introducing a cross-curricular approach can be very challenging and has not been adapted as hoped in various settings (Borg et al., 2012; Dyment et al., 2015; Kuzich et al., 2015; Mokhele, 2011). Dyment et al. (2015) suggest that the extent to which this integration is occurring in Australia is largely unknown. Tilbury et al. (2005) draw attention to the difficulties that Australian schools experience in
reorienting school education towards sustainability. They note that there is resistance among educators to using education as an instrument of policy and of adding more issues to an already crowded curriculum. They found that this issue, combined with the large-scale, costly endeavour of re-orienting education, has seen the integration of some sustainability concepts into curriculum content rather than the radical educational change agreed to (Tilbury et al., 2005). In their study of Geography and Science graduate teachers and their mentors in England and Wales, Summers, Childs, and Corney (2005:624) concluded that ‘while the theoretical arguments for interdisciplinary implementation are strong ... such approaches are problematic’. The problems are evident in the growing volume of literature on the issue. Dyment et al. (2015) and Mokhele (2011) consider attempts to embed ESD across the curriculum in Tasmania, Australia, and South Africa respectively. Both noted a lack of understanding by educators around EE/EfS and the implications for the ability of schools to apply a cross-curricular approach and the need for improved pre-service training and in-service professional learning for teachers in this area. The quality and availability of professional development that is available for EE teachers is an issue raised by various academics in the EE field (Dyment et al., 2015; Ferreira et al., 2006; Mokhele & Jita, 2008; Robottom, 2013; Robottom & Kyburz-Graber, 2000; Summers et al., 2005; Vasconcelos, 2012). Kuzich et al. (2015) found that even within a specialty sustainable school, teachers lacked access to professional learning due to the focus on mandatory content and assessment (primarily in literacy and numeracy).

Dyment et al. (2015) and Mokhele (2011) both conclude that while there are some schools making progress in this space, the cross-curricular approach can and does result in EE/EfS ending up being invisible or neglected. Mokhele (2011) concludes that the cross-curricular approach to EE is near impossible given the current conditions prevailing in South African schools. Kuzich et al. (2015) examined a purpose-built sustainable school in Western Australia and reported the same difficulties as the other studies mentioned above. They found that a lack of specificity in the Australian Curriculum makes it difficult for teachers to know what and how to teach about sustainability. When teachers decide what to concentrate on and implement it within a school setting, priority is likely given to those aspects of the curriculum that are mandated (Kuzich et al., 2015:186). Like Dyment et al. (2015) and Mokhele (2011), Kuzich et al. (2015:186) concluded that ‘there is a risk that teachers may choose to ignore EfS, especially if other mandated and assessed priorities compete with EfS. Consequently, the lofty intent of the new Australian Curriculum cross-curricular priority of sustainability may remain largely unrealized’. This is a sentiment echoed by Gruenewald (2004:77), who suggests that the absence of ecological and related social issues from the public educational agenda is almost complete. Where EE appears, it is as an add-on to an already crowded disciplinary field, as vague and unrealistic.
standards lost in a sea of other standards, or as a novel way to approach interdisciplinary learning. In its place is an equally deep and widespread commitment to preparing youth for successful participation in economic life.

EE in secondary education

The issues of the lack of legitimacy of EE within the formal education sector and the marginalisation of EE are often written about in the context of primary schools. These issues are not limited to primary schools and are present and magnified in high schools where the focus on examinations and results leaves little room for cross-curricular approaches and the types of pedagogy and social and ecological content favoured by EE. While the literature cited in this section is largely from the Global North, the following chapters show how the Indonesian education system’s absolute focus on exams, combined with the lack of legitimacy for EE, have resulted in the national EE program (Adiwiyata) being run almost completely outside of the classroom.

Environmental education in secondary years of schooling is often delivered with a ‘knowledge as priority’ focus, as it fits more easily into science curricula and supports exam-focused outcomes (Jiang, 2004; Maulidya et al., 2014; Steele, 2011). A cross-curricular, whole school approach is generally more easily implemented in primary schools than in secondary schools due to the differing pedagogies and aims of the different levels of education. There are various factors that make the implementation of EE more challenging in secondary schools. The reported factors include: a crowded curriculum; a heavy focus on exams; differing philosophies and dissimilar pedagogies between EE and examinable subject areas (such as science); and teachers with no EE background (or training) being expected to integrate EE into their subject areas (Borg et al., 2012; A. Gough, 2002; Goussia-Rizou & Konstadinos, 2004; Steele, 2011; Tilbury et al., 2005; Yueh & Barker, 2011). Indonesian educators are dealing with these same issues (Zulfikar, 2009) as is evident in the following chapters.

In addition to the difficulties of implementing EE in secondary schools, there are some common inadequacies that have been identified in EE in secondary schools in different parts of the world. These include: students have little capacity to carry out environmentally responsible behaviours at school as part of their environmental education program; most science education focuses on education about the environment and fails to provide students suitable opportunity to facilitate action or explore mechanisms for social change in regards to environmental issues and related behaviours; students feel disillusioned and uninterested in ‘blame-based’ environmental education; environmental education is seldom a mandatory curriculum topic in secondary schools, and therefore is most
frequently only addressed as a result of individual teachers' interest or passion; and, despite evidence discouraging it, many educators continue to focus on content knowledge when teaching EE in high schools, rather than developing student capacities for change (Barrett et al., 2005; Jiang, 2004; Prabawa-Sear & Baudains, 2011; Steele, 2011; Tilbury et al., 2005).

The process of developing capacities or skills to enable change is important not only in ensuring that there are positive environmental outcomes as a result of EE, but also to avoid generating feelings of helplessness and futility which can result from education that simply provides knowledge of environmental problems and does not assist students in contributing towards solutions (Nagel, 2005). While there is a risk that Indonesian youth may experience the feelings of helplessness and futility that Nagel warns of, it is important to note that Indonesia is a religiously devout country, so young people in Indonesia can and do rely on their religious faith and leaders to guide them. As explored later in this thesis, there is also a very strong cultural value of accepting one’s destiny (nrimo). These cultural differences highlight the importance of context in EE. Motivating factors and reasons for inaction are not universal and should not be treated as such.

EE and the opportunity to act

There is a chorus of voices calling for EE that provides students opportunities to act (Barrett et al., 2005; Nagel, 2005; Payne, 2001; Rickinson, 2010; Stevenson, 2007). It is argued that in contrast to content-focused education, action-oriented education is more likely to generate concerned and engaged citizens who are determined to address complex social, ecological and economic issues (Barrett et al., 2005; P. Hart, 2008). Students who are involved in place-based, experiential learning are said to not only develop a closer connection to the natural environment, but also are more engaged in their learning and are happier and healthier students (Bowler, Buyung-Ali, Knight, & Pullin, 2010; National Environmental Education Foundation, 2013; Powers, 2004). Stevenson (2007:143) argues for students to be exposed to the plurality of environmental ideologies and, through a process of inquiry, critique and reflection, they can be assisted to develop and defend their own set of environmental beliefs and values. This would then place students in a position to choose to pursue actions in accordance with their environmental ideology. He notes that students need to be competent to act on their convictions. If EE fails students by not developing their ability to act on their choices, in effect, they have no choice.

The action element of EE is multilayered. It provides many benefits that knowledge-focused (or environmental literacy-focused) education does not. It provides opportunity for students to achieve
positive environmental outcomes from their own actions and in doing so learn how to bring about change (and the reality of the difficulties associated with it). It also helps to combat the doom and gloom aspect of EE which has often been the focus in the past. Previously, many efforts in the EE field have focused on delivering knowledge and awareness-raising and have neglected to provide opportunity for action. Nagel (2005) succinctly articulates the dangers in such an approach to EE in his article ‘Constructing Apathy: How Environmentalism and Environmental Education May Be Fostering “Learned Hopelessness” in Children’. Nagel (2005) argues that there is one pressing concern that needs to be addressed before we can consider the importance of action (or inaction). This is the importance of a positive message and a positive approach to environmental education. He argues that contemporary youths are being raised on a diet of negative discourse surrounding the environment and sustainable development which, instead of scaring them into action, has caused a generation of children that are not only apathetic to environmental issues, but are ‘lost in a confused muddle of learned hopelessness’ (Nagel, 2005:71). This line of argument suggests that if we expect to see any positive outcomes from educational efforts for the environment, there needs to be opportunities for learners to engage in positive dialogue and action. Referring to various studies with similar findings, Nagel’s work calls EE into question and suggests that EE ‘consider[s] carefully its place in providing quality educational experiences that counteract this sense of hopelessness, or risk becoming nothing more than an antiquated accomplice in gloom, hopelessness and apathy’ (Nagel, 2005:77). Issues of apathy, hopelessness and helplessness are also identified in Payne’s (2001) article, which examines the role of identity in EE. One of his informants described how some of her inaction could be attributed to a sense of helplessness and ‘the way in which I am made to feel part of the problem but not part of the solution’ (Payne, 2001:69).

Unlike other unwavering calls for action in EE, Barrett et al. (2005) suggest that action-oriented approaches to environmental and sustainability education should come with cautions. They note the importance of practitioners attending to the difference between ‘token’ and ‘authentic’ participation, distinguishing between actions and behaviours and refraining from limiting their focus to science, the natural environment and lifestyle environmentalism. They suggest that failure to attend to these concerns means that action-oriented educational initiatives may actually undermine students’ sense of agency, support student passivity and simple solutions and gloss over the complexity of causes of environmental problems, including their intersections with social and economic systems, and ultimately, politics and power (Barrett et al., 2005:507). It is difficult to disagree with these cautions, as they support what is widely agreed to be an effective approach to EE.
However, when considering the role of action-oriented approaches to EE in Indonesia, one must consider the vast cultural differences between Global North contexts and schools in Indonesia. As described in the section on Education in Indonesia, while MOEC documentation makes reference to terms such as active learning and student-centred learning, these are not common approaches to teaching, as they do not fit comfortably with the expectations of the local culture and most teachers have not been trained how to make students the centre of their pedagogy. In the Javanese context, students are expected to be passive recipients of knowledge and the teacher is responsible for conveying the facts (Bjork, 2005, 2013). While action and ability to act are assigned high value in Global North societies and education systems, they are not in Indonesia, particularly in Java and Bali, where inactivity is assigned a much higher value (Anderson, 1990 [1972]; Djajadiningrat-Nieuwenhuis, 1987; Parker, 2003). Inactivity is critical in acquisition of Javanese power (Anderson, 1990 [1972]; Djajadiningrat-Nieuwenhuis, 1987). Men are able to acquire power through inaction or asceticism. For example, the less a leader (Pak RT) has to do in preparation for a kampung (neighbourhood) event, the more powerful he is. If he were to have to undertake physical work (such as helping to move a wayang (puppet theatre) stage into place) he would be demonstrating that he has little power. A powerful man (almost always a man) has ways of making things happen without needing to exert physical effort and with little fuss. His inaction is manifestation of his power. Djajadiningrat-Nieuwenhuis (1987:46) explains that pamrih (intention or personal motive) is a threat to power and that it ‘means doing something not because it has to be done, but because it satisfies personal interest or desires’. Unlike other anthropologists before her, Djajadiningrat-Nieuwenhuis (1987) considered how and why men were able to acquire power through asceticism and concluded that it was because the women were doing the doing. She argues that ‘[t]he Bapak has authority and prestige, whereas the Ibu acts’ (Djajadiningrat-Nieuwenhuis, 1987:44). I observed this in aspects of everyday life in Java. Women are largely responsible for shopping, house-work, taking children to school, cooking and preparing for kampung events (in which they often do not participate), and in current times, many also engage in paid work. It is still common for Javanese men to not work, or work casually while engaging in activities such as bird singing competitions, collecting and trading gem stones, or playing cards. Javanese men are not expected to work hard and this is increasingly so, the higher the social standing the man has. This social norm was also evident in the schools, as described in Chapter Five. At the Madrasah the number of female students outnumbers the males both on campus and in the

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32 Anderson (1990 [1972]) highlights the difficulty in defining and translating Javanese concepts of power to a non-Javanese audience. He likens Javanese concepts of power to those of spiritual power as found in the Bible. See Anderson (1990 [1972]:20) for more on this. Djajadiningrat-Nieuwenhuis (1987:46) describes Javanese power as being homogenous and suggests that it stands in contrast to ‘Western’ power, which has heterogeneous sources such as wealth, status and profession.
environmental group, yet it is the male students who are the leaders and the speakers in the focus
groups, and it is the female students who are busily doing the sweeping and cleaning on Bersih (clean
up) days.

Barrett et al. (2005) found that engaging in action-oriented activities in schools challenges dominant conceptions about the organisation and transmission of knowledge, creating for most teachers and students contradictions with standard approaches to teaching and learning. They acknowledge the difficulties experienced by both teachers and students in redefining and assuming unfamiliar roles that challenge the traditions of Canadian education. Attempts in Indonesia to modify the curriculum and pedagogies were rejected by teachers and parents during the course of my fieldwork. The 2013 Curriculum was recalled due to teachers and parents struggling to adjust to a more outcomes-based, student-centred curriculum. Before Indonesian educators could adopt an action-oriented approach, much work would be needed to provide effective professional development for teachers and the wider education sector, re-defining roles and building trust to allow for shifts in power dynamics in the student-teacher relationship (Bjork, 2013).

Hart’s (2008) reference to an international program that strives for active participation in community-based social action but struggles for legitimacy within the educational system sounds like a fitting description for Indonesia. He describes ‘seeing students and teachers “caught” in traditional (inscribed) roles that perform teacher and student as a reflection of the authority of tradition, yet as contradictory storylines, remains frustrating’ (P. Hart, 2008:26).

Hart, Jickling, and Kool (1999) also explore issues related to action-oriented EE. They raise the question of whether educators can ask students to engage in social action if they themselves do not. In the case of Indonesia, this question needs to be extended to whether schools and EE programs can ask students to engage in social action if their teachers, families and communities outside of the school do not. As demonstrated in Chapter Six, Surabaya are currently doing this with varying levels of success.

Student voice

There are varied arguments as to why student voice should be heard and considered in education. These arguments include issues of children’s rights (Jean Rudduck & Flutter, 2000), student empowerment and political agency (O’Boyle, 2013; Rudduck, 2002; Rudduck & Flutter, 2000) , the value of the student perspective in education evaluation and improvement (Cook-Sather, 2002; A. Gough, 1999; McIntyre, Pedder, & Rudduck, 2005), educational benefits for students (Bushe, 2012;
Student voice is an important consideration in EE, but it cannot be considered in isolation. Education culture and the positioning of young people within schools, families and society must all be considered in order to understand the complexities and difficulties in attempting to amplify student voice in EE. All of the complexities noted above exist for students in my research. Javanese culture cannot and should not be left at the school gate. As described in the previous chapter, this means that any attempts to change teaching traditions, including traditions of power, come up against cultural values that centre on the notion of respect, and the need to demonstrate respect through knowing one’s place in the social hierarchy.

Hopfenbeck (2013) provides Norwegian examples of student voice influencing education at the highest level. She describes the Norwegian Student Union for students aged 13-18, through which students participate in hearings on official policy documents and regularly attend meetings with the Directorate for Teaching and Training and the Ministry of Education. In contrast, O’Boyle (2013) reports on an English example where ‘young people’s talk about themselves and their educational experiences do not seem to be valued in public discourse about education’ (O’Boyle, 2013:136). O’Boyle argues that the cultural narratives which surround the education of young people seem to be founded on an underlying belief of predetermination (i.e. a focus on their future state rather than current existence, a need for society to homogenise, and the objectification of young people), which in turn seems to eradicate any real need to consult with them (O’Boyle, 2013:136). She considers a lack of student voice in education to be a firm barrier to young people becoming active and critical citizens. Research that includes student voice serves a broader purpose than presenting young people’s views to an audience of decision makers and those in positions of power. O’Boyle (2013) and Rudduck and Flutter (2000) suggest that student voice in research can also serve as an avenue to promote young people’s political agency and assist in creating a new order of experience for them as active participants, thereby helping them to move from silence and invisibility to influence and visibility. While these arguments may be relevant to the British, or Global North context, they are very far from the reality in Indonesia. As demonstrated in the literature on EE in Indonesia (and in education research in Indonesia more generally), there is little interest in student views of their educational experience.

Walford (2008) acknowledges the considerable growth in studies that try to include the voice of children and the vitality of students’ views in school improvements. Unlike Ruddock (2002), who calls for both teachers and external researchers to research student voice in education, Walford (2008)
suggests that teachers and school administrators are not in an ideal position to gain such views, due to their power over learners. He suggests that ethnographers (who have built relationships of trust with the children) are in a position to gather data that are likely to be of ‘considerably more use and validity’ (Walford, 2008:12). Ethnographers may indeed be in a good position to conduct research in school, but Walford’s position on this issue simplifies the relationships of power both between students and teachers and between students and ethnographers. It also does not consider that teacher-student relationships could be redefined as part of a larger cultural shift in schools (Cook-Sather, 2002; Elwood, 2013). In the case of Indonesia, there is little desire to see any such shift from within the education sector or from the wider society. As described in the following chapters, students find it difficult to criticise their schools and teachers, and are more inclined to identify themselves as reasons for shortcomings in their education experience. With this in mind, positions such as those of Barratt Hacking, Cutter-Mackenzie, and Barratt (2013), which call for EE research to move beyond observing or consulting students, towards more collaborative approaches and ultimately, children as researchers, are currently inapplicable for Indonesia.

In reference to an English example of student voice, Elwood (2013) cautions that in order for student voice to succeed, a cultural shift is needed to authenticate the process of consultation and participation. Her study found that despite being included in consultation, students felt they were being ‘half listened to’ and that they really ‘didn’t have that much power’ when it came to effecting change, and were critical of the tokenistic nature of the consultation (Elwood, 2013:107). Student reflections such as these suggest caution against the ‘optimistic and relatively unquestioning approaches to voice that ignore the ever-present power relations between adults and young people in schools…and oversimplifies a complex process to the detriment of the quality of outcomes’ (Elwood, 2013:107).

Student voice is broadly considered a desirable aspect of education research. There are, however, some difficulties in directly eliciting pupils’ views of some aspects of schooling. This is acknowledged by Rudduck and Flutter (2000), who suggest that students are not necessarily in a position to offer much insight into certain aspects of education, particularly curriculum. Students are limited in knowing only what they have experienced and have no idea of what they have not, but they are in a good position to offer insight into conditions of learning (Rudduck & Flutter, 2000).

Much of the discussion on student voice in the literature is made in reference to British schools. Rudduck (2002) acknowledges that there are some situations where change characterised by new partnerships in learning is less likely to happen (and may therefore result in the negative consequences
listed above). She describes these situations as: schools where the academic success of the majority is assured and endorsed by parents (then pupil consultation may not have a foothold); schools where pupils are convinced they do not matter; schools where, at the personal level, pupils may be embarrassed by being seen talking with teachers (or researchers); schools where there can be no suspension of disbelief about the possibility of building alternative teacher-pupil relationships (Rudduck, 2002:134). These descriptions are fitting for Indonesian schools, where student voice is not a valued part of education and goes against a strong societal culture of valuing and demonstrating respect for those of a higher social standing, including teachers, knowing one’s place and upholding the appearance of social harmony. The Yogyakarta and Surabaya examples in the following chapters demonstrate the realities of EE in the two cities and raise the question of the value and impact of EE that does not include student voice.

**EE in Indonesia**

UNESCO is largely acknowledged as the leading agency in shaping the direction of EE globally through the Tbilisi Declaration of 1978 (resulting from the 1977 UNESCO-UNEP Intergovernmental Conference on Environmental Education), Agenda 21 (the global action plan from the United Nations Conference on Environment and Development (1992)), the UNESCO Decade for ESD (2005-2014), The Bonn Declaration of 2009 and various other charters, publications and programs.33

In 2014, the Indonesian Ministry of Education and Culture, through the Indonesian National Commission for UNESCO (Komisi Nasional Indonesia untuk UNESCO), commissioned the publication of the book, *Pendidikan untuk pembangunan berkelanjutan di Indonesia: Implementasi dan kisah sukses* (Education for Sustainable Development in Indonesia: Implementation and success stories). The aim of the publication was to document and publicise the efforts of the Indonesian government in introducing ESD to formal education and its ongoing commitment to the UN’s education programs, in particular the Decade for Education for Sustainable Development (Seta & Mochtar, 2014:v). In the introduction, the Chair of the Indonesian National Commission for UNESCO suggests that Indonesians should be proud because ESD has long been a part of the Indonesian education system, only it had not been clearly identified as such (Seta & Mochtar, 2014:vi). I am not convinced that there had been a misidentification of EE, but did find it interesting that the Chair felt the need to present the situation as such, rather than acknowledging the challenges of implementing EE in the formal education system.

33 See A. Gough (2013) for a ‘History’ of the field.
UNESCO is considered the ‘lead agency’ for EE in Indonesia and was instrumental in the introduction of the Adiwiyata schools EE program in 2006 as part of the Decade for Education for Sustainable Development (DESD) (Seta & Mochtar, 2014). Despite being under the UNESCO Education Program, UNESCO in Jakarta currently does not use the terms EE or ESD when advocating for local councils and the Ministry of Education and Culture to embrace ESD. Instead it focuses on the Sustainable Development Goals, in particular, Sustainable Development Goal 4.7. The reason behind this is an observed lack of interest and support for environmental education by decision makers.

The Adiwiyata Program is an environmental education program that was created by the (then) national Ministry of Environment and introduced to 10 pilot schools in 2006. Schools can choose to participate in the Program, and it has since grown to include 7,278 schools from across Indonesia (Kementerian Lingkungan Hidup dan Kehutanan [Ministry of Environment and Forests], 2017). The Adiwiyata Program ‘aims to develop students who take responsibility in efforts to protect and manage the natural environment through school governance which supports sustainable development’ (Kementerian Lingkungan Hidup [Ministry of Environment], 2012:3) (my translation). Its two main principles reported in official documents are: participation - school communities are involved in school management that includes the whole process of planning, implementation and evaluation in accordance with roles and responsibilities – and sustainability – all activities must be done comprehensively in a planned and continuous manner (Kementerian Lingkungan Hidup [Ministry of Environment], 2012:3).

Rather than building capacity for change among students, the aims of the Adiwiyata Program focus on building the capacity of the school, and of the different levels of management. While this appears to be a sound aim, as demonstrated in later chapters, it has meant that the role of students in the EE programs has been reduced to a labour force and participants for the sake of making up the numbers. Adiwiyata schools have the opportunity to be assessed annually in order to move up the Adiwiyata

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34 Interview with National Program Officer for Education, Jakarta, 31 January 2017
35 The Sustainable Development Goal 4.7 target is ‘by 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture’s contribution to sustainable development’ (UNESCO, n.d.-b).
36 Interview with National Program Officer for Education, Jakarta, 31 January 2017
37 While Adiwiyata is not a compulsory program, some schools are told that they must participate in order to improve the school’s reputation or to give it a speciality in order to attract ‘better’ students. This number reflects schools that are participating in the program at any level.
The ranking levels are: District/City (Kabupaten/Kota), Province (Propinsi), National (Nasional) and Independent (Mandiri).\textsuperscript{38} The Adiwiyata Program is highly prescriptive: schools are scored (usually between 0 - 5 marks) for actions related to areas of policy, curriculum, participation in activities and environmental management. The Adiwiyata Program focuses on teachers and school management of the environment above all else, with a reliance on figures and numbers to document the achievement of standards. As described later in this thesis, the reliance on numbers has resulted in forced participation in activities with few learning outcomes.

\textbf{NGOs and EE}

While the Adiwiyata Program is the only formal EE program offered through the government to schools, there are numerous NGOs and local community groups working on social and environmental causes.

The \textit{United Nations’ Plan of Implementation of the World Summit on Sustainable Development} highlights the need to ‘enhance partnerships between governmental and non-governmental actors, including all major groups, as well as volunteer groups, on programmes and activities for the achievement of sustainable development at all levels’ (United Nations, 2002:62). Tilbury, Goldstein, and Ryan (2003) argue that the increasing importance of the roles of NGOs in EE (ESD) were highlighted during the 1992 Earth Summit in Rio de Janeiro and reinforced at the 2002 World Summit for Sustainable Development in Johannesburg, where the work of this sector was increasingly profiled and identified as key to laying the foundations for change. They suggest that the role played by NGOs in advancing education for sustainable development cannot be underestimated, as NGOs are involved not only in initiating and/or supporting grassroots processes towards sustainable development, but also in agenda-setting, influencing policy, and global governance.

The concept of state and non-state partnerships is increasingly being discussed in the literature as a way of effectively addressing the provision of education to under-served populations (DeStefano & Schuh Moore, 2010). Although the partnerships and programs referred to in this paper are for basic education, the findings could be applied to EE programs being delivered by NGOs. In their assessment of 10 USAID-funded educational quality improvement programs, DeStefano and Schuh Moore (2010) concluded that the long-term sustainability of the programs was often uncertain and highly dependent on continued external funding; the programs provided a more flexible environment that allowed

\textsuperscript{38} The two Yogyakarta schools in this thesis were National level.
providers to mix inputs and processes so that schools could better cater to the needs of under-served communities; and that the partnerships often led to more cost-effective attainment of educational outputs such as completion and learning.

As explored in the example of the Centre for Orangutan Protection in Chapter Five, there are multiple challenges that prevent the development of large-scale and long-term relationships between environmental NGOs and schools. The major challenges include: a lack of access to schools due to limited relationships with MOEC at the district and provincial levels; a lack of understanding of how their cause and content could fit within the curriculum; a lack of resources (financial and human); and in many cases, a lack of educational expertise within the NGO team. Chapter Six of this thesis explores the situation in Surabaya, where the achievements of Green Action (an environmental NGO) suggest that with the right networks (private and government supporters) and relationships (social capital), environmental ENGOs can have significant impact in the EE space. However, the long-term sustainability of this situation is questionable.

**Globalisation of EE/ESD**

There are many critics of the concept of ESD within the environmental education field. Many have warned of the effects of globalisation on EE (N. Gough 2002, 2014; Jickling and Wals 2007; Nikolopoulou, Abraham and Mirbagheri 2010; Sauvé, Berryman, and Brunelle 2000, 2003; Sumner 2008). Bengtsson and Östman (2013:477) explain that critics have often depicted ESD ‘as entailing and promoting globalising ideologies that run counter to the ambitions of a strong environmentalist perspective’, and in many cases, ESD is ‘described by these critics as a tool of neoliberalist globalisation, which undermines the sovereignty of national pluralism by aligning educational policy with economic development objectives’. Sauvé, Berryman and Brunelle have written extensively about the globalisation of environment-related education and the resulting reduction of education to a sub-sector of the economy marked by anthropocentric, resourcist, and neo-liberal ideology (Berryman & Sauvé, 2016; Sauvé, 2008; Sauvé et al., 2007; Sauvé et al., 2005). In their critical hermeneutic of 30 years of guidelines for environment-related education, Sauvé et al. (2007) found that the documents identified an urgent need for environmental solutions and then affirmed that education must be urgently reformed to serve such an end. Sauvé et al. (2007:37) suggest that ‘[n]ations are invited to find so-called contextually adapted strategies to implement education for sustainable development, but most often, no invitation is made to discuss the relevance of this end. All the educational systems around the world are expected and urgently pressed to be reformed for such a purpose.’ In the section on EE in Indonesia above, it is clear that this was the path to the
implementation of EE/ESD in Indonesia. The results of this approach are considered in the ensuing chapters of this thesis. While Sauvé et al. (2007:39) highlighted various concerns of international approaches to ESD, they saw that the greatest issue was the constant assertion of the need to learn how to act urgently on critical problems, but that the idea of an education which involves reflexivity is neglected. As this thesis demonstrates, EE efforts in Yogyakarta and Surabaya neglect the idea of reflexivity in education. While this can be partly attributed to the approaches promoted by UNESCO through its ESD policies and the Decade for Education of Sustainability, as highlighted in the section on Education in Indonesia, this is a characteristic of Indonesian education more broadly. It may be argued that this lack of reflexivity is a characteristic of formal education in many countries both within the Global South and beyond.

The notion of EE or ESD being a top-down, generalised, universalised necessity that must be adapted locally is problematic. The lack of discussion around how EE/ESD came to be prescribed (by the Global North) and eagerly accepted and promoted is an issue that requires further research with more diverse voices. Sauvé et al. (2005:279) question how this came to be the case. They raise the question of whether, in contexts of poverty, the adoption of the sustainable development framework can be explained by a need to adopt the language and strategies of international funding agencies. Chapter Seven of this thesis offers insights from the Indonesia Environmental Education Network training workshop where NGOs, encouraged by government officials, were accepting the new language (ESD) and encouraging each other to do the same in order to secure funding. Sauvé et al. (2005) warn that we should be wary when ESD is promoted as the ultimate and omnipotent, rather than ‘only one’ of the numerous axiological possibilities for environment-related education.

N. Gough (2014) and Hart and Hart (2014) raise the issue of what constitutes knowledge and learning and the often implicit and unintentional privileging of Western knowledge and learning over others. Hart and Hart (2014) suggest that because teachers' views about knowledge and teaching have been pre-structured by cultural discourses, forms of EE/ESD that challenge these taken-for-granted assumptions may be ignored or resisted. This was indeed found to be the case in Yogyakarta and Surabaya and develops as a theme throughout this thesis.

This section on the globalisation of EE highlights that there are numerous scholars within the EE field who have been voicing their concerns about the globalisation of EE/ESD. What remains to be explored in more detail is the impact that this globalisation has on EE efforts in diverse contexts – those outside of the Global North. This thesis considers the outcome when globalised ESD is applied in Indonesia
with consideration of the impact of Javanese values. While Javanese values are used to highlight the
difficulties and incompatibilities in attempts to apply Global North approaches, the issues within
schools and the broader education system that are highlighted throughout this thesis are all issues
across Indonesia. Despite decentralisation, issues of teachers as civil servants first and foremost, a
reliance on textbooks, focus on exams, and teachers lacking knowledge of environmental issues and
student-centred pedagogies are national issues.

Conclusion

By reviewing literature from the fields of anthropology, education and environmental education and
applying it to the Indonesian context, this chapter has provided a background for my research on EE
in senior high schools in Yogyakarta and Surabaya. The goals, pedagogies, and issues associated with
EE and its globalisation were considered, exposing the dearth of literature that considers EE in the
Global South and the impact of culture on EE practice.

The chapter identified gaps in the literature around EE in the Global South context. It demonstrated
that EE is often written about in the Global North context with the often incorrect assumption that
the theories, findings and international programs developed in the Global North are applicable to an
international audience (including the Global South). This chapter highlighted attempts by UNESCO to
globalise EE and ESD and the difficulties associated with pushes for universal actions and cross-
curricula integration. The following chapters, based on my ethnographic study, provide in-depth
description of the state of EE in senior high schools in Java and the roles of government, ENGOs and
teachers. They consider the importance of culture and the impact that it has on student behaviours.
The final chapters offer possibilities for EE in Indonesia that take into account cultural expectations
and positive educational and environmental outcomes.
Chapter Four: Approaches, field sites and positioning

Introduction

The purpose of this study, as discussed in Chapter One, is to examine approaches to EE in senior high schools in Yogyakarta and Surabaya with a particular focus on how culture impacts on definitions and practice of EE; the factors that account for greater participation and student engagement in one city over another; and the role of environmental NGOs (ENGOs) in the delivery of EE in the two cities. In the early stages of this research project, the plan was to undertake an ethnographic study in order to gain what Clifford Geertz (1973) referred to as a ‘thick description’ of EE in Yogyakarta – this being a description that is context-based and considers local frames of meaning of what is being observed.

It was, however, necessary to draw from a range of approaches to arrive at an appropriate design for the data collection and analysis. There were various reasons for this, including the need to take on a second research site. It quickly became clear that a dual-site and multi-disciplinary approach would be best suited, as my original site (Yogyakarta) had very few senior high schools engaging in EE and working with ENGOs, whereas the second site (Surabaya) had a unique approach in which almost every school was working with a local ENGO to deliver EE. Focusing on Surabaya alone may have been a more uplifting experience and provided the rich data I was after, but it would have also served to perpetuate the gaps in research and relative silence on the shortcomings and challenges of EE in Indonesia. Undertaking research at both sites allowed me to explore common practices in EE, as seen in Yogyakarta, and position them next to a more strategic and dedicated approach to EE as undertaken in Surabaya.

Naturalistic inquiry is defined by its lack of predetermined constraints on findings (Patton, 2002). It requires design flexibility, pragmatic considerations, a high tolerance for uncertainty, as well as trust in the ultimate value of what inductive analysis will yield. Before embarking on the fieldwork element of this research project, I had hoped to undertake a classical ethnographic approach. After a couple of months in Yogyakarta, it was clear that in order to achieve the depth of data that I desired, my approach was going to be dictated by the situation – by what was and was not happening in Yogyakarta and Surabaya. This study therefore combines a range of approaches from ethnographic research for the study of EE in and around senior high schools in Yogyakarta and Surabaya.

The data sources and methods employed for the study included the following:
• semi-structured interviews with government officials directly or indirectly involved in EE in Surabaya and Yogyakarta;
• semi-structured interviews and questionnaires with members of ENGOs;
• semi-structured interviews, focus group discussions and questionnaires with teachers involved with EE in senior high schools;
• semi-structured interviews, focus group discussions and questionnaires with students involved in EE in senior high schools;
• participant observation of environmental activities and lessons in schools;
• participant observation of environmental activities carried out in partnerships between ENGOs and schools; and
• participant observation of ENGOs and their EE programs.  

The dual city, integrative mixed methodology approach (Hall & Preissle, 2015) allowed for a balance among the perspectives of the learners, educators, government officials and ENGO EE providers. The participation of students, educators and non-teaching stakeholders provided opportunity for triangulation of data, and thereby increased the credibility and trustworthiness of the data (Cresswell & Plano Clark, 2017). This approach also offered an insight into the roles of different government employees and offices and provided understanding of factors influencing the differing levels of commitment to EE programs. The complexity of relationships outside of the schools among ENGOs, government and teachers that influence the presence and quality of EE in schools may not have been evident had I undertaken a single methodological approach such as school ethnography. By the end of the fieldwork period I had utilised various approaches and methods that provided me with many insightful experiences and a very broad and complex view of EE in Indonesian senior high schools.

This chapter will describe not only the research approaches taken in this project, but also ethical considerations and the impact of perspective and self-reflexivity on data analysis. This chapter covers the approaches used in detail, but at the same time, aims to familiarise the reader with the ways that Javanese culture impacts on every part of this research. By doing this, I set the foundation for the following chapters where culture is interwoven and inextricable from education, government, leadership and the natural environment.

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39 Questionnaire data were not used in this thesis due to word limitations. Questionnaires for students were developed as part of the larger research project and were used in a joint publication. See Parker, Prabawa-Sear, and Kustiningsih (2018).
I start this chapter by describing the research design: the site, participants, and data collection methods, and how these elements of my research expanded and changed as a result of my early findings (or lack thereof). I then move on to present the three major groups of my study: ENGOs, schools and government, and describe how I selected these participants and collected data with the three groups in Yogyakarta and Surabaya. I then outline the data analysis procedures and finish with ethical considerations and challenges faced whilst conducting the research.

Research design

Research site and participants

This research project was conducted in two cities: Yogyakarta (Central Java) and Surabaya (East Java). In each city there were three main groups of participants: schools (teachers and students), ENGOs, and government officials. During the fieldwork period, I was based in Yogyakarta and made five trips to Surabaya, staying between five and eight days each time. When the Surabayan ENGO travelled to Perth for an environmental exchange project and to deliver teacher training in Yogyakarta, I joined them and undertook participant observation.

I chose to undertake research with senior high school students (rather than younger students) for a variety of reasons. Senior high school students are aged 15-18 years. Students of this age are ideal for the following reasons:

1. they are largely articulate;
2. they have long been exposed to the values of their schools, families and communities;
3. they have some awareness of community values and social, political and environmental issues;
4. they are old enough to be active in green campaigns and ENGOs, both through school and independently;
5. they (may) have EE as a part of their curriculum or compulsory extra-curricular activities (Parus, 2005); and
6. senior high school education can be assumed to represent a high level of knowledge and understanding that is general amongst the population in Indonesia.

Selection of the research sites

Prior to travelling to Indonesia for this fieldwork, I planned to focus on EE solely in Yogyakarta. This was due to various reasons. Yogyakarta is a special city in many ways: it is the only place in Indonesia
that maintains the special administrative status that recognises it as a Sultanate (the Special Region of Yogyakarta (Daerah Istimewa Yogyakarta, DIY)), with the Sultan as the hereditary Governor of the region; it is famous for its *kraton* (Javanese palace) culture, including Javanese social stratification and stratified language; it is known across the archipelago as the heartland of Javanese culture; the Central Javanese consider themselves the most *halus* (refined) people of Indonesia; and it was the Indonesian capital during the Indonesian National Revolution from 1945 to 1949. The region immediately surrounding Yogyakarta is also home to Mt Merapi, an active volcano of spiritual importance, as well as Borobudur, a Buddhist temple built in the 9th century and Prambanan, a Hindu temple compound built in the 10th century.\footnote{Borobudur is located in Magelang, but is associated with Yogyakarta. Most tourists (domestic and foreign) travel through Yogyakarta to get there, as Magelang does not have an airport.}

Yogyakarta is known as a student city. Although DIY is a geographically small region (approximately 3183 km²) and even smaller city (32.8km²), it is home to a population of 3.4 million people and hosts over 3000 primary, middle and secondary schools (194 senior high schools) and 130 tertiary institutions (Dinas Pendidikan, Pemuda & Olahraga DIY, 2013, 2015). Secondary and tertiary students come from all over the archipelago to attend schools and universities in Yogyakarta, making it an excellent site to examine education of any kind. It hosts many NGOs and ENGOs that are active throughout the country and supported by the large population of university students living in the city. Yogyakarta has a steady stream of foreign tourists and a community of expatriates, many of whom are involved with the NGOs.
Prior to my arrival in Yogyakarta for this fieldwork, I had previously lived there for four years whilst studying at Gadjah Mada University as an undergraduate student and then as a teacher and translator. Although I had been living in Australia for ten years immediately prior to my fieldwork, I had regularly travelled to Yogyakarta on holidays to visit family and friends with my children and husband, who was born and raised in Yogyakarta. Yogyakarta was a second home where I had family and friends and contacts in NGOs. I was also well versed and comfortable with Javanese culture and, in addition to fluent Indonesian, had a high degree of familiarity with the Javanese language.

Subsequent to my early work and undergraduate studies in Indonesia, I had accumulated work and research experience in the field of EE in the ten years leading up to my research for this project. This work and study included: completing a Masters by Research degree in Environmental Education for Sustainability at Murdoch University, focusing on EE in one Australian senior high school (Prabawa-Sear, 2010); working for the Department of Environment (Western Australia State Government) in community education, managing a schools-based education program with a focus on teacher training; and in the five years immediately preceding my departure, working as an EE consultant with a focus on designing and evaluating EE programs. These experiences shaped my understanding of EE in the
Australian context. Through my consulting work, I had become aware of EE efforts in Surabaya, and I had an optimistic image of what Yogyakarta might offer in regard to EE.

After three months of investigation, it became clear that there was very little happening in regard to EE in senior high schools in Yogyakarta. The ENGOs reported a lack of interest from schools, and schools had many varied reasons why they were not including EE in any significant way. This meant that I was faced with a dilemma. Yogyakarta could not offer me anywhere near a complete picture of EE and certainly not the diversity of approaches or depth that I had hoped for. For this reason, I considered Surabaya.

Surabaya is city of 2.7 million people on the northern coast of East Java (Badan Pusat Statistik [Bureau of Statistics], 2010b). It is a port city with more ethnic and religious diversity than Yogyakarta (many more Chinese-Indonesians, Madurese as well as members of Bugis and other ethnic groups), and a lot more wealth (Badan Pusat Statistik Kota Surabaya [Surabaya City Bureau of Statistics], 2016). It has 161 senior high schools and 1,471 schools in total (Kementerian Pendidikan dan Kebudayaan [Ministry of Education and Culture], n.d.). While I had been warned off Surabaya by friends and family in the past (on account of its heavy pollution and kasar (un-refined) Javanese language and culture), Surabaya offered many benefits to this research project. The city had been undergoing a green transformation; EE was very strong in schools and was supported across government offices. In addition to having compulsory EE in schools by order of the Mayor (Tri Rismaharini, known as Ibu Risma), there was a pre-existing relationship among an ENGO, the Surabayan government and schools to introduce and support EE in schools. I had also previously met the leader of this ENGO, Green Action, who had agreed to be a part of my research.

Surabaya is no longer the heavily polluted city it once was and was an inspiring and uplifting place to conduct research. The kasar Javanese language of Surabaya was sometimes a little abrasive for me as someone who has spent so long in Yogyakarta, but the more straightforward manner of speaking also made for a refreshing change at times.

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41 The population of Surabaya City was 2.7 million in the last (2010) census, whereas Yogyakarta City recorded a population of just 387,000. The greater Yogyakarta region (DIY) recorded 3.4 million (Badan Pusat Statistik [Bureau of Statistics], 2010b).

42 Because the Javanese of Yogyakarta consider themselves the most refined (halus) of Javanese people, anyone else, including Surabayans, is considered un-refined (kasar) in comparison.
Although both cities are in Java, they are very different cities geographically, economically and socially. Surabaya is the second largest city in Indonesia, the largest city in East Java. It is a much more industrial city than Yogyakarta and a major port. The mayor of Surabaya is well known for her hard line approach and success in transforming Surabaya into a very liveable city – in stark contrast to Yogyakarta which suffers from a lack of planning, infrastructure and facilities. Yogyakarta’s mayor is not well known and is largely seen as lacking strength and conviction in his dealings with developers. The role of the mayor in Yogyakarta is seen to be somewhat less important than in other cities as the Sultan is seen to be the major decision maker (more on this in Chapter Seven). As it turned out, the different leadership approaches of the mayors filtered down and greatly influenced the uptake of EE in schools in these two cities, providing me with varied data for my research.

Ethnography, ethnographic approaches and school ethnographies

Prior to my arrival in Yogyakarta, I planned to take an ethnographic approach to researching EE in Yogyakarta senior high schools and participant observation with one or more ENGOs over a 12 to 18 month period. I had hoped that I could observe the schools engaged in active and meaningful EE in order to understand how EE was delivered, how it was defined and how the schools worked with ENGOs to deliver the EE. Whether or not a researcher can be considered a participant observer is debated in literature on school ethnography. Spindler and Hammond (2000) suggest that ethnography which involves observation (participant observation) can take many forms including classroom observations, playing with children in lunchbreaks and socialising with teachers. With the lack of action in the schools, I felt that rather than being a participant, I was more of a ‘privileged observer’ (Wolcott, 1988) who, as it turned out, was observing two schools trying to work their way up the Adiwiyata rankings (as described in Chapter Five), whilst doing very little to benefit the environment or build students’ understanding of or care for the natural environment.

Vulliamy (1990) argues that the effectiveness of qualitative methods such as ethnography in educational research partly lies in their ability to describe actual practice in schools and its convergence and divergence from policy. It quickly became evident that Yogyakartan EE diverges from policy in that there is a national EE program (Adiwiyata) that is available to Yogyakarta schools, yet there is very little uptake of the program by the schools. In those schools that are participating in the program, there is a focus on achieving prestige and winning rather than environmental learning and action (see subsequent chapters for more on this). Despite there being 194 senior high schools in the region, I could not locate enough schools doing an adequate level of EE to carry out my research (Dinas Pendidikan, Pemuda & Olahraga DIY, 2015). After initial visits to four schools, speaking to the Office
of Education, Youth and Sport and three ENGOs, it became apparent that this approach would not work for the following reasons: schools were not working with ENGOs in any long-term or structured way; the schools that were recommended to me (as environmental schools) had a rather ad hoc approach to EE and ‘hands-on’ activities were usually only undertaken on special days, such as the school birthday or a religious day or school camp; the one school that offered environmental extra-curricular activities cancelled them due to ‘mismanagement’. None of the schools offered enough EE inside or outside of the classroom to accommodate an ethnographic study.

The apparent lack of EE in Yogyakarta senior high schools led me to look for examples outside of Yogyakarta. Surabaya was an obvious choice. By taking on Surabaya as a second site, I was able to gain an understanding of how the Surabaya government, Green Action and schools interact in delivering EE in schools and compare this to the Yogyakarta situation. Instead of undertaking single school ethnography in Surabaya, my focus was on Green Action, how it functioned and how it worked with government and schools to deliver EE. During my time with Green Action in Surabaya, I undertook several activities: I visited 15 senior high schools (some multiple times), two middle schools and three primary schools; observed and participated in NGO presentations, workshops, community activities, and educational school visits; judged competitions; interviewed staff; and spent time at the office and socialising with Green Action staff and volunteers. During this time, I conducted semi-structured interviews with government officials and teachers, focus group discussions (FGD) with students and teachers, and was a participant observer. I also joined a group of teachers, students and Green Action staff on a cross-cultural exchange tour to Perth. My ethnographic methods were largely dictated by the situation and my attempts to make the most of the opportunities presented to me.

Unlike the Surabaya case, Yogyakarta schools undertake most of their environmental activities without support from ENGOs. Although there are various ENGOs in Yogyakarta that would like to work more closely with schools, this has yet to happen in any organised or large scale way. In an effort to understand the situation, I spoke with representatives of nine different ENGOs in Yogyakarta. Most of them had not worked with any senior high schools, and some mentioned that it was too hard, as these schools were focused on exams, whereas primary and middle schools were much more welcoming. Most of the groups I spoke to were content with undertaking small-scale activism and the occasional school visit to primary schools. The Centre for Orangutan Protection (COP) was the most proactive of the ENGOs to whose members I spoke and became the Yogyakarta-based ENGO for my research.

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All school, ENGO and individual names are pseudonyms, except for the Centre for Orangutan Protection. The Centre for Orangutan Protection encouraged me to use its name in an effort to raise the profile of the organisation and their work.
Due to diplomatic difficulties between Australia and Indonesia, my research permit application was frozen for many months, before being delayed further due to a mishap within the research permit office. This meant I was placed in research limbo for many months and the onset of my fieldwork was delayed. Instead of having 12 to 18 months to conduct fieldwork, I was limited to approximately 12 months. I was in the fortunate position of continuing to live in Yogyakarta after completing my fieldwork, which meant I kept in touch with many of my new friends and colleagues in the field of EE after the official research period had ended.

**Environmental NGOs (ENGOs)**

**Selection of ENGOs**

Yogyakarta

My search for suitable ENGOs began by word of mouth and I was soon introduced to a group of university students who were running an informal green youth NGO (referred to as Green Youth hereafter). Green Youth members were enthusiastic and keen to meet me and share their ideals with me. I came to learn from interviews and observations that the group focused heavily on clictivism (social media activism) and their rather impressive Twitter feed was not an accurate portrayal of their action off-line. Lim (2013), argues that social media activism has a tendency to be ‘fast, thin and many’ and that it should not be perceived as a causal agent having a pivotal role in promoting social change. After a few months of observing Green Youth’s efforts on social media in comparison to their off-line action, I was certain that this group did not fit my criteria. Amongst other things, they had not undertaken any senior high school visits and did not look to have any on the horizon. I continued to follow the group on social media, but decided to look for a more suitable ENGO.

As a result of following Green Youth on social media, I was made aware of an upcoming sustainability fair. I attended the fair and met with five ENGOs, including Green Youth. I spoke to representatives from each of the ENGOs, all of whom were university students. Not one of the five groups reported having worked with senior high schools. Some were working with primary schools, and one was working with a middle school. They all had extensive points of contact – Facebook, Twitter, email and multiple phone applications contacts. I asked all of them if they knew anyone working with senior high schools, and they all told me, no, they did not. Their own reasons for not working with high schools were reasons that I had heard before – senior high schools are focused on exams, older kids are hard to teach, harder to control, and younger kids are more impressionable.
The Centre for Orangutan Protection was the only group I had met whose staff members were working with senior high schools, or at least actively pursuing them. I was friends with one of the founders of COP and had done voluntary translations and interpreting for them in the past, which provided a good foundation for me to approach them and work with them. Although COP did not specialise in EE, their focus was on education for forest conservation, which I felt fit within my definition of EE.

Part way through my fieldwork, I came across another very small ENGO that was trying hard to work with schools to deliver EE. Their desired approach was similar to that of Green Action in Surabaya, but for reasons highlighted in Chapter Seven, they did not have the same level of support from government or sponsors and were therefore only working on an ad hoc basis with a handful of schools. I had the opportunity to meet with them and observe their interactions with teachers on three occasions. This ENGO was not as receptive to being researched as some of the others, but invited me to a school with them and members were happy to be interviewed. The founder and I kept in touch, but it became evident that they were more interested in how I could help them financially (finding sponsors) than they were in sharing their experiences or being researched.

In addition to the above mentioned groups, there were two other ENGOs in Yogyakarta that I came to know and observe delivering EE in schools. I was very keen to observe these groups more, but they had limited activities in schools. I spoke to representatives of both groups and came to understand that although they would like to work more with schools, for various reasons such as financial and volunteer constraints, they had yet to develop a strong education program and were lucky to visit two or three primary schools in a year.

The Centre for Orangutan Protection became my major ENGO research interest in Yogyakarta. I joined them on training camps, meetings, social events, NGO fairs, fundraising events and school visits. I conducted training for them on various occasions and also worked with them to deliver a six-week education program at my daughter’s school. My active participation with COP continued after my official fieldwork period ended.

One of the unplanned but very useful aspects of my research with ENGOs in Yogyakarta came about through my involvement in my daughter’s school (hereafter referred to as The Community School). As part of The Community School’s environmental program, I invited four local NGOs to work with the school on topics including permaculture, engaging with the natural environment, animal welfare and
forest conservation. Two of the ENGOs came to the school once a week for six weeks to work with the environmental club on projects, one came on one occasion and despite multiple requests, one never came. My interactions and observations with these ENGOs provided a valuable insight into their different approaches to EE and the capacity of ENGOs to provide high quality EE to schools.

Surabaya

Although there are various NGOs in Surabaya that focus on environmental issues, Green Action is by far the biggest and has the backing of the Surabaya government across different offices, including Education, Environment, and Sanitation and Parks. By virtue of an undocumented decree from the mayor, Green Action has access to all Surabaya schools, and all schools are expected to have an environmental program at their school. This, combined with my having previously met some of the Green Action team, meant that it was a straightforward decision to work with them. I was looking to investigate a model that was working (in contrast to the situation in Yogyakarta) and Green Action was clearly working effectively on an administrative level to be present and active in many schools.

Observing ENGOs

Surabaya

My observations of Green Action were conducted in three cities – Surabaya, Yogyakarta (on a professional development training session at my daughter’s school) and in Perth (on a cross-cultural exchange). My time in Surabaya was spent observing school incursions with the Eco-mobil, training workshops for teachers and students, observing and judging competitions, observing activities in the Green Action office, and observing interactions with government officials and public events. Because I was very much a participant observer, my techniques were determined by the situation. Whatever the occasion, I had my notebook and my mobile phone that served as audio recorder and camera. When I could, I sat at the back of the group during presentations and tried (rather unsuccessfully) to be inconspicuous, whilst taking detailed notes, photographs and occasional videos. When I was asked to present at workshops or be part of a judging panel, I was at the front and where possible took notes at the time. Where this was not possible, I took notes as soon as possible afterwards. I was always careful to ask my Green Action friends for further details and clarifications where I felt necessary. A paid researcher from the wider ARC-funded EE project joined me for five days, and we had the opportunity to share notes and discuss our observations of Green Action, the schools and some

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44 The Eco-mobil is a specially fitted van, used for free school incursions and community events. See Chapter Six for more on this.
government officials. It was a useful experience for us both, and I learned from her the skill and importance of taking detailed notes. This experience was also very valuable in that it served as reassurance for me that a more experienced anthropologist and native speaker of Indonesian was observing the same events in a similar manner to me.

In addition to observing Green Action in their offline work, I paid close attention to their Instagram, Facebook and Twitter accounts and often visited their webpage for updates on activities. I found this to be a more reliable technique than waiting to be informed of upcoming events by Green Action staff and gained considerable insight into the organisation’s use of social media.

Yogyakarta

My research methods with COP were very similar to those that I used with Green Action. One of the main differences between the two organisations is that COP has many dedicated volunteers who serve a very important role in the work of the organisation, particularly in regard to education efforts. This meant that in addition to observing school incursions, I also observed and participated in various training workshops and volunteer sessions with the group. Many training sessions were carried out at COP headquarters, and others were on camping trips and hikes. In such situations, I generally focused on participating and taking photos, and I wrote up notes during breaks and at the end of the day. From my first day with COP, they included me in various private Facebook groups which were set up as communication channels for staff and volunteers for different events. This meant that I had easy access to participants, details of events, and afterwards, details from COP’s blogs and updates, which always included photographs. This served as a useful secondary source on occasions where I needed to check details.

**Interviewing ENGOs**

In addition to numerous non-recorded interviews and conversations, I conducted and recorded five interviews each with COP and Green Action staff. I had a list of pre-prepared questions that I referred to as needed, and interviews varied in length from 15 minutes to 1 hour 20 minutes. I took minimal notes during these interviews and focused on the conversations. I wrote up my notes after the interview with the confidence of having audio recordings to listen to.
Schools

Selection of schools in Yogyakarta

The multi-site design of this study was not chosen in order to carry out any type of controlled comparison of EE programs between schools, ENGOs or cities in Indonesia. Rather, it was intended to gain a broader perspective on the diversity of approaches to EE in different types of senior high schools (Islamic state schools and general, non-religiously aligned state schools), differing levels of government involvement and leadership in both Yogyakarta and Surabaya, and differing approaches by ENGOs to EE in secondary schools. For these reasons, it was not considered necessary to strictly control variables in the selection of schools and ENGOs. It was considered important, however, to include schools and ENGOs which differed from one another in significant ways in order to maximise the possibility of finding different approaches, levels of success, and factors influencing the success or otherwise of the EE programs. I acknowledge that by observing the ‘best’ Adiwiyata schools, I was not exposed to the ‘norm’. Considering the lack of EE in the schools that I observed in Yogyakarta, it is fair to assume that the norm is no EE.

As it happened, the selection process for schools in Yogyakarta became a search for a suitable school. My first port of call was the regional (DIY) Office of Education, Youth and Sport. The official with whom I spoke (a former principal of one of Yogyakarta’s best public schools) was not sure of the best environmentally active schools, but suggested seven schools to visit. I visited and spoke to the principals of four of those schools (who told me not to bother with the other three, as they had no EE programs). Only one of the schools seemed to have an environmental program running. Each school principal offered me reasons as to why their school was not a strong environmental school. I asked each principal if they knew of any other environmental schools in addition to those on my list. They could not think of any schools to suggest.

My next point of call was the regional (DIY) Environmental Agency office (Badan Lingkungan Hidup) where I met with government officials responsible for the program at the regional level. I was supplied with a list of schools that were currently participating in the Adiwiyata Program which is run by the Ministry for Environment and Forestry and administered at various levels of government. The list contained two primary schools, two middle schools and two senior high schools. Each type of school had one school in Yogyakarta city and one in the Bantul district (see Figure 4.1). From this list I selected and contacted a madrasah (state Islamic day school – referred to as The Madrasah henceforth) and a non-religiously aligned state school (SMA Negeri – referred to as The SMA henceforth). These schools were selected on the following bases: they were currently participating in the Adiwiyata program at a
high level; they were willing to have me conduct research at the school; they were located reasonably close to the city (within a 45-minute drive from my home); and they were different types of schools (Islamic and non-religiously aligned). Ideally, I would have liked to include a Catholic school in my selection, but there were no Catholic schools at the senior high school level that had a focused environmental program in Yogyakarta. Catholic schools make up approximately eight percent (16 out of 194) of senior high schools in the Yogyakarta region (DIY), so there were not many Catholic schools to choose from (Dinas Pendidikan, Pemuda & Olahraga DIY, 2015; Kementrian Agama, 2008). I selected Adiwiyata schools over non-Adiwiyata schools, even though there was one school not participating in the Adiwiyata program that seemed to have a strong environmental program. I felt that it was important for me to understand not only the strengths and limitations of EE programs in schools, but also the role that government played in delivering those programs. I also knew that I would have the opportunity in Surabaya to explore EE programs in schools that were not high-achieving Adiwiyata schools. This meant that the one school suggested by the Office of Education, Youth and Sport that was running an EE program was not selected. Of my two selected Yogyakarta schools, one school (The Madrasah) was situated within the Yogyakarta city limits in a very heavily developed and commercial part of the city. The second (The SMA) was just outside the city boundaries, situated in the Bantul district amongst rice fields and a residential, village neighbourhood. I settled on only two schools in Yogyakarta as I felt this would be sufficient and manageable in addition to my research with Yogyakarta-based ENGOs, government officials and the Surabaya-based research.

Selection of schools in Surabaya

The focus of my research in Surabaya was Green Action, rather than particular schools. I was undertaking an ethnographic study of the organisation and the schools were an important part of that study, but not the focus. The schools that I researched in Surabaya were selected through negotiation with Green Action. Green Action had certain schools that they wanted me to visit, as reward or encouragement for the school, and I also had criteria that I wanted to meet. My requests in the negotiations were as follows: to visit a range of schools, including state and private schools; to visit schools of differing socio-economic standing; to visit schools with different levels of commitment and achievement; and to visit academic and vocational schools. Most of the 15 schools that I visited were already working with Green Action, but two were not yet collaborating. The 15 schools selected met the criteria that I had put forward when negotiating with Green Action.
School visits in Yogyakarta

School visits were always prearranged with the contact teacher in an effort to capture any environmental actions or lessons going on at the school. Because the schools took a very ad hoc approach to their environmental activities, it was pointless for me to wait at the school. It was often a week or more between activities, and in some cases a month or more. This meant that I had to rely on the teacher knowing that something was planned and inviting me. On more than one occasion, I learned after the fact that the school had undertaken an activity that would have been relevant to my research, but the teacher had forgotten to inform me. This seemed to happen less as time went on, but I was in a position of limited power and had to accept this. At both schools I gave my mobile phone number to environmental club students (with the teacher’s permission), so that they could inform me of upcoming events in an effort to minimise missed opportunities.

My observations at the Yogyakarta schools were carried out over an eleven-month period. Some weeks I would visit the schools once or twice and other weeks not at all, depending on their schedules. I only observed classes with environmental content (as defined by the teachers). I often visited on Friday and Saturday mornings when clean-ups and environmental activities were scheduled. Because the schools ran their clean-ups at the same time, I tried to divide my time between them.

In addition to environmental activity-based visits, I ran FGD with students and teachers at both schools, recorded interviews with some student leaders at both schools and held informal conversations with numerous students. The informal conversations were not audio recorded, but I took notes where possible.

School visits in Surabaya

My school visits in Surabaya were arranged by Green Action. Unlike my Yogyakarta visits, time was usually limited and the visits were quite structured. Most of the visits occurred as follows: a group of students (usually environmental leaders) took me on a tour of the school grounds, pointing out and explaining environmental projects; we (students, Green Action representative and I) moved inside to a quieter area where I explained my research briefly and asked students to complete a questionnaire; I then facilitated a FGD with students, and on some occasions this was followed by questionnaires and FGDs with teachers.45 I visited some schools two and three times and others just once. I also spent

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45 The data from this questionnaire were not included in the thesis due to word limits but were used for a publication. See (Parker et al., 2018).
time with students and teachers at training workshops, competitions and various other Green Action events. My approach to collecting data in Surabayan schools was not ethnographic in that the visits were short and infrequent, but these visits provided a valuable insight into how Green Action worked with schools and how students and teachers reflected on their EE experiences.

**Focus group discussion – Schools**

Over the course of my fieldwork, I conducted more than 60 semi-structured interviews and FGDs with a range of government officials, teachers, principals and students. Focus group discussions were held with students who were members of the school environmental club. I had a list of questions as prompts for all interviews and FGDs to which I referred. I had the list of questions for two reasons—in case anyone (such as a school principal or teacher) wanted to know in advance what I’d be asking, and as a prompt for me in order to avoid forgetting to ask particular questions if the topic was not covered in the natural flow of discussion. I referred to these questions more in the earlier interviews and less in the later ones. As different themes emerged in the research, my questions shifted focus slightly to better explore these themes.

I conducted FGDs with environmental club members at two Yogyakarta schools and five Surabaya schools. Focus group discussions ranged in time from 20 to 45 minutes. I was officially introduced by a teacher prior to the discussions in Yogyakarta schools before the teacher left the room. In Surabaya I was accompanied by a Green Action colleague. Where teachers did not voluntarily leave the room, I thanked them for helping me get the group together and let them know that it would be fine if they wanted to go on with other work while we did our discussion. The teachers seemed quite happy with this.

The students completed a questionnaire before we started the discussion. We generally sat around a large table with the audio recorder (my iPhone) in the middle of the table, recording the conversation. I tried to be casual and friendly in my approach, often making jokes to keep the mood light-hearted and to try to put the students at ease.

When conducting FGDs, I found students and some teachers were more at ease answering specific questions to start with; then as we warmed up and went on, in most cases, the conversation became more fluid. In some situations this did not occur, and we stuck mostly to questions, but generally it happened this way. This was the case for many reasons: my being a foreigner and researcher (of perceived high standing); nervousness (on their behalf) on not knowing what to expect; nervousness
about thinking that they would have to use English; nervousness about not being able to answer ‘correctly’ and nervousness about making themselves, their school, or even their region look bad. In an effort to combat this, I tried to be casual and light hearted.

During FGDs with students, there was a clear pattern of the (student) leader (usually the elected head of the environmental club and his deputy) speaking on behalf of the group. In all instances this was a male. I was conscious of male voices dominating the discussions even where females were represented in equal or greater numbers. I tried to directly address female students in some instances and in others asked the group members to each give their opinion in turn. Despite my best efforts, this seemed to cause more discomfort, as I was ‘shining the spotlight’ on less confident speakers and in some cases, asking them to speak out of turn. In writing about community meetings in urban Java, Guinness (2009:244) notes that ‘in such a forum, principles of harmony and consensus could easily overshadow those of equal participation’. The same was true of the FGDs. On the rare occasion that a mildly critical comment was made, it was always by male students. As described in Chapter Two, in Javanese society, there is an expectation that men (Bapak) have authority and prestige, whereas the women (Ibu) carrying out the work (‘act’) (Djajadiningrat-Nieuwenhuis, 1987:44; Shiraishi, 1997). It was evident from the FGDs and observations of EE activities that the students very much followed these gender roles.

The discussions usually ended with an unrecorded general chat. The conversations generally started with EE and environmental issues in Australia. Inevitably, the topic turned to my history, where I was from, how I learnt Indonesian and why I became interested in the environment. I was always happy to share this with the students. On many occasions the students thanked me for my time and for listening to them and talking to them about something that they really cared about.

Observations – Schools

Due to the diverse nature of EE and the ad hoc approaches of the schools to EE, it would not have been practical to set any rigid observation plan or criteria. When observing classes, I always noted the teacher, class, age, gender of students and wrote detailed notes on every possible aspect of the lesson that related to EE in any sense – lesson content, language use, actions, student involvement, passive versus active pedagogies, use of text, etc. I rarely joined in the ‘hands-on’ activities and instead opted for a quiet observer approach. This was in an effort to not draw too much attention away from the activities and to encourage students to go about their business as usual.
Despite my very best efforts to be discrete and not interrupt or influence how classes and activities ran, I was always of interest to students. Even in the later stages of my research, I still had girls fascinated by my appearance, and in some cases (particularly in Surabaya), students told me they found it hard to speak because they were in shock to see a white person face to face and particularly one who could speak Indonesian. It was not unusual to be asked for photographs with older students and autographs by younger students. Teachers also apologised from time to time about how excited and loud the boys were in my presence.

When observing activities, I wrote notes on as many aspects as possible. These notes described the setting, participants, activities and any other observations that I felt relevant. As soon as possible afterwards, I typed up complete field notes in documents under titled sections and saved the files with photographs and audio recordings in an effort to make the data easier to locate later. I also kept note of emerging themes in the data during the fieldwork and my observations that were relevant to these themes. My notes included screenshots of social media pages of the ENGOs and on occasion newspaper articles, school website articles and other secondary sources.

**Government**

![Diagram of Government Structure](image)

*Figure 4.2 Higher government structure in Indonesia*
**Government interviews**

The approach I took to selecting interviewees differed considerably between the two cities. This was largely due to the differing focus of my research and the different roles that the government offices played in each city. In Surabaya I was focusing on how Green Action worked with government and how different government offices worked together to deliver large-scale EE, whereas in Yogyakarta I was more interested in how the government offices were supporting the schools. My interviewee selections were therefore dictated by which government offices and levels of government were doing this work.

In Surabaya, I conducted interviews with heads of the Office of Sanitation and Parks, Environmental Agency and Education Office. These are the agencies with which Green Action works to deliver EE; in most cases, Green Action is working with the heads of the offices, or deputy heads. For this reason, I interviewed the heads of the office. As a starting point for interviews, I generally asked the interviewee to explain how their office had come to work with Green Action and EE in Surabaya and let the conversation take its natural path from there. I did not have a pre-prepared list of questions for these interviews, but had a few dot points to which I referred.

In Yogyakarta, I conducted four interviews with government officials from the Environmental Agency and one with an official from the Office of Education, Youth and Sport. Unlike Surabaya, these offices do not work together to deliver EE and in some cases the district level government does not work with the regional (DIY) level. Most of the work done with schools is carried out by the district level government, but the regional level is responsible for budgets and decision making for DIY, so I conducted interviews with the district level representative for the two districts representing my schools, as well as two interviews at the regional level of the Environmental Agency.

All interviews with government officials in both cities were conducted at the interviewee’s office. Interviews lasted between 25 and 90 minutes. All interviews were audio recorded with permission and later transcribed.

**Reliability of data**

**Language proficiency of the researcher**

All research conducted during my time in the field was done in Indonesian. The only exception was when interviewing native speakers of English (in two ENGOs); these interviews were conducted in
English. Three of the ENGO interviewees were proficient in English, and these interviews contained a mix of English and Indonesian. I encouraged interviewees to speak in Indonesian so that they could express themselves with ease. My language proficiency was not an issue, as I had studied Indonesian as a high school and university student, attended an Indonesian university on exchange, had been married to a Javanese man for more than 10 years, and had lived in Indonesia for about 5 of the past 16 years. I consider Indonesian my second language. Although words sometimes escaped me, I was always confident that I understood what was being said and at the very least, had recordings in most instances to which I could refer later. Perhaps more importantly, I felt that I had cultural fluency – what Moore (2009:252) describes as being 'more than the knowledge of and ability to use a given field language in ways that are grammatical and socioculturally appropriate' and includes gestures and social nuances (Tanu & Dales, 2016). Cultural fluency, I believe, is a helpful and important skill in any setting, and this is particularly true for Yogyakarta.

Despite my proficiency and comfort with the language, being a foreigner often made others anxious and nervous in the first instance. Many of my informants told me I was the first Westerner to whom they had spoken and, despite being told that I could speak Indonesian, feared having to try to converse in English. None of them had ever met a Westerner who was proficient in Indonesian. Although this discomfort reduced over time, it undoubtedly influenced early conversations. Tanu and Dales (2016) suggest that the researcher’s language proficiency is mediated by other factors such as physical appearance, accent and gender. They argue that the researcher’s positionality is in part a result of their perceived language proficiency, which impacts upon the data collected. My struggles with positionality are described later in this chapter.

I did not use a translator or field assistant. I felt that there was no need, and that this could open the door for miscommunication and misunderstanding, particularly if the assistant did not have an environmental or education background. I experienced firsthand how easily messages can be misinterpreted when acting as a translator for a visiting German academic. My colleague was presenting in English to a group of students, and I was translating into Indonesian for them. At one point I conferred with the class teacher to ask if *kaptivitas* (captivity) was a word or had I made it up? She replied, ‘Yes, we say *kandang* (cage)’. The point that the German academic was making was that orangutans have longer life spans and experience puberty earlier when kept in captivity as opposed to living in the wild. The teacher then proceeded to tell the students that orangutans live longer in cages. This left me in the uncomfortable position of having to correct the statement and explain that captivity does not necessarily mean cage, whilst trying my best not to embarrass the teacher.
Transcription of data

Most interviews and all FGDs were audio recorded and later transcribed. There were a few exceptions where conversations occurred in a natural manner, and I felt that by asking to audio record I would ruin the flow of the conversation or the interviewee might become more reserved in their comments. In these situations, I took notes as appropriate and added to these written notes as soon as possible afterwards. All audio recordings were transcribed by a sociologist and some undergraduate students at the local university. I reviewed each transcript for accuracy.

Transcripts of interviews and FGDs were written in Indonesian. I worked with the transcripts in Indonesian and translated quotes into English where necessary. If I was ever unsure of a translation, I consulted with my husband, a native speaker of both Indonesian and Javanese.

Data analysis

Because I had conducted all interviews and FGDs myself, I was familiar with the topics and themes as they emerged throughout my fieldwork. All field notes were saved as MS Word documents. Because I had observed the events, written notes and then typed the notes with key words and themes allocated, this meant that I could easily search for key words and themes in my notes. I often re-listened to sections of the audio recordings and read and re-read transcripts. I also used MS Word searches to locate certain themes and took notes on emerging themes both in the field and during analysis and considered how I might explore them further with the research participants. I also sought and read literature related to emerging themes during the analysis and discussed ideas with other researchers and colleagues.

Trustworthiness of data

The quality and the content of the “data” that a researcher “gathers” have as much to do with the researcher as they do with the informants or research participants (Gottlieb, 2006:48).

Qualitative research has long suffered accusations regarding its ability to produce reliable and valid data. Like many social scientists, I employed a mixed methods approach in an effort to gather the most robust data possible. Data from single conversations were checked against data from other
sources where possible. ‘Data from other sources’ were usually similar conversations with other students, other teachers or other ENGO workers and then triangulated with data from other sources including other teachers, students, ENGO workers and some secondary sources, including news articles, ENGO reports, government publications, and academic articles. Secondary sources were particularly useful in checking details of policy and events referred to in interviews and discussions with ENGOs and government employees. In some instances I asked the same or very similar questions of students, teachers, government officials and ENGOs in an effort to understand the perspectives of all involved. The combination of observation, interview and FGD data and secondary sources meant that I was able to explore the differences between what was said (in interviews and FGDs), what was documented (in policies, government texts and on social media), and what was observed, or, in many cases, not observed.

Gottlieb (2006:48) suggests that ‘the way in which information is collected affects the content of the data themselves’. My interviews with government heads in Surabaya provided an example of this. Green Action had a long-standing working relationship with two of the three government offices whose heads I interviewed, and was working on developing a closer relationship with the third. These relationships were valuable to all parties (as explored in Chapter Six). Green Action pre-arranged two of the three interviews and introduced me to the head of the third office. My colleagues from Green Action were present at my three government interviews. I weighed up the possible impact of their arranging and attending the interviews and possible alternatives prior to the event. I decided that the presence of my colleagues was most likely to cause a positive bias in conversations, and it was something that I had the capacity to take into account in my analysis. I also felt that having Green Action colleagues present at interviews provided me with valuable insight into the relationship between the ENGO and the government offices. There was no denying that they also provided me an ease of access to these people that I may not have been able to get on my own. I was often introduced as a friend of Green Action, which I believe made the interviewees feel more relaxed and candid. I took this into account when analysing interviews where Green Action and the government representatives praised one another’s work. I felt that I had made enough observations of my own to put this into perspective, e.g. I had seen that publicly praising one another’s work was common amongst the different offices and Green Action, but could still see shortcomings in their interactions. As described in Chapter Six, Green Action’s presence and behaviour in the meetings gave me a clear and important understanding of their different levels of familiarity and closeness with the three different office heads.
The dangers of short-term visits in the field when researching schools are highlighted by Hammersley (2006). He cites the example of a classroom that is observed on a Friday and suggests that if the same class were to be observed on a Tuesday, it would not necessarily have the same routines and patterns. He warns against misconceptions resulting from a failure to take account of the cyclical patterns that often operate within settings: assuming that what happens on one day of the week is much the same as what occurs on other days. Spindler (2000) argues that at least a year should be spent with a group in ethnographic studies in order to hear, see, feel and be told the same things by different people at different times in order to obtain valid observations. My visits to the two Yogyakarta schools occurred across the spread of a year and on different days in an effort to gain a comprehensive understanding of the school’s EE programs. Environmental activities where usually undertaken on a Friday for *Jumat Bersih* (Clean Friday) or *Sabtu Bersih* (Clean Saturday) activities and environmental lessons occurred on whichever day the subject was taught. The mood around the school was much more relaxed on the *bersih* days compared to regular days, with teachers and students often not attending class on time or wearing the correct uniform. These were the days when most of the physical environmental work was supposed to be done.

Despite this sounding like a long period of time, I was aware that my experiences in schools were affected by the number of opportunities I had to observe and interact with the participants, the ways they perceived and positioned me, and the images they wanted to present to me (Wang, 2012). The participants and I were also limited in our understandings of each other because we only ever met in the school context. My conclusions about students’ and teachers’ commitment to and interest in the environment were based on my experiences with them in one or two contexts. Hammersley (2006:5) cautions against ‘treating people as if their behaviour in the situations we study is entirely a product of those situations, rather than of who they are and what they do elsewhere simply because we do not have observational data about the rest of their lives’. While I understand and agree with Hammersley to a degree, I also argue that how teachers and students behave at school is a large part of who they are. While the setting may influence one’s behaviour or commitment to the environment to a degree, if one has strong environmental values and facility to act on them, then these values and commitment should be evident in one’s behaviour, particularly over a long period of observation. It is, however, important to recognise that there may be limited facility for students to act on their environmental values in the school environment for various reasons, including lack of infrastructure (e.g. access to recycling bins, fresh water to refill drink bottles) and powerlessness to increase opportunities to engage in environmental behaviour (decisions made largely by principals and
teachers). Other aspects such as peer influence and lack of solidarity or whole school involvement will also influence a student’s environmental behaviour (Prabawa-Sear & Baudains, 2011).

**Self-reflexivity in data analysis**

During my fieldwork in Yogyakarta, I came to know a German anthropologist, Thomas Stodulka, who was researching the effect of emotions on researchers in the field. Stodulka (2014) argues that systematic self-reflexivity and an emotionally aware epistemology enhance both the anthropologist’s emotional literacy and their understanding of informants and interlocutors. For the second half of my fieldwork, I participated in Stodulka’s research project by keeping an emotional field diary. I completed an emotional survey and answered various open-ended questions about my reactions to my participants and events that had unfolded in the course of my fieldwork. I completed 12 of these diaries, attended a workshop and seminar facilitated by Stodulka, and was interviewed by Stodulka on my emotional experiences undertaking fieldwork in Indonesia. By being involved in this research project as a participant, I was encouraged to not only be self-reflexive and emotionally aware, but also to document it. This meant that when I was revisiting my ethnographic data, I could cross-reference it with my emotional responses. My participation in this project engendered a level of mindfulness that I did not have beforehand. Through using the reflexivity tools, I was able to reflect on instances during my fieldwork and identify where my emotional reaction to instances was impacting on how I was recording the events in my field notes.

An example of my emotional responses impacting my data occurred whilst I was at The Madrasah. A refusal to shake my hand by a male teacher whom I knew and with whom I had spent time speaking at length both offended and upset me. I found myself noting that this school was perhaps not the standard of school I had thought it was and that it was lacking in more ways than its environmental shortcomings. Upon reflection, I came to the conclusion that I was annoyed at myself for offering my hand to shake (out of polite habit), when I knew that a devout Muslim man would likely refuse my hand as I was of the opposite sex. I was angry at the teacher for embarrassing me in front of our colleagues by refusing my hand. My altered perception of the quality of the school was not based on any evidence, but rather a reaction to my hurt pride. It was unavoidable that my reactions to people and events would shape my data, but having the opportunity to systematically reflect on these events assisted me to be more understanding of my own reactions and those of the research participants.
Ethical considerations and protocols

During a time when the Indonesian government is furiously attempting to reform its education system, it is essential that studies of Indonesian schools and society give serious consideration to local perspectives about education, in all of their complexity (Bjork, 2005:xv).

As with any fieldwork, there were various ethical issues that I faced during my fieldwork. Although participation in my research was voluntary and this was made clear to all participants, I acknowledge that particularly for students, there was an expectation by their teachers that they would participate if asked. Indonesian students are not afforded much agency generally, so it was always assumed by the adults that the students would participate, whether participating in FGDs or answering questionnaires. In some respects the same assumptions were made across the board. Schools that had been identified as possibilities by government officials or Green Action were expected to participate and I was told by more than one government official to “tell them Pak XX sent you”, indicating that this would influence their willingness or efforts to participate. Similarly, in all instances the school principal granted permission and directed me to the teachers who would be responsible for me. There did not appear to be much discussion about whether the teacher would like to participate. In one instance it became quite obvious to me that teachers were reluctant to have me observe their classes. I tried my best to discuss this with them in order to put them at ease and also remind them that I would not name them or the school, assuring them that I was not there to judge their teaching but to observe environmental activities and gauge students’ views. Although some of them seemed quite uncomfortable with the idea, none of them said no. I feel this was for two reasons. Firstly, their principal had already agreed and they were not in a position to go against this. Secondly, I was a foreign researcher, and my mere presence at the school was an opportunity for them to gain status and prestige, particularly in regard to the Adiwiyata program.

There were a few occasions in Surabaya where Green Action took me to a school without pre-arranging it with the principal. This placed both the principal and me in an uncomfortable situation, as the principal was put on the spot to say yes or no to having me there while I was waiting in the administration area. Some principals were hesitant until they knew that I had written permission from Jakarta to conduct the research. I cannot be sure if the letter put them at ease, as I was following protocols and had permission, or whether it meant that they had no grounds to reject me. Even though I had explained my research verbally and, in some cases, provided the project proposal, I felt that
many of the teachers and students participating in my research did not understand my research and the possibilities of future publications to the degree that I would have liked. Although this concerned me, it did not seem to concern anyone else.

These power issues, I felt, were largely out of my control and inextricably connected with Javanese culture and values related to respect and power. Although I always made it very clear, verbally and in written communication, that everyone had a choice whether or not to participate, I felt like the structural conditions of power far outweighed my efforts. Although I believe this to be true, I experienced many occasions where teachers made excuses for not being available to be observed. This is a much more culturally acceptable way of saying no in Javanese culture and I politely accepted and did not question their reasons.

**The dilemma of what to give in return**

On two occasions I found myself in a position where the participant was of the impression that I was a person of more influence than I was. I tried telling both of them (in separate cases) that I did not have access to potential sponsors or investors and that I could not arrange a certificate for them from my university. I felt confident that I had not misrepresented myself, but it seemed that the fact that I was a foreigner meant that I would be well connected and could get for them whatever it was that they desired in return for their participation in my research. Neither seemed willing to take me on my word. As this made me extremely uncomfortable, I decided to discontinue communication. I was not uncomfortable with them asking me to help them; that is something that I am used to as a foreigner in Indonesia. I was very uncomfortable with the misunderstanding of power and the incorrect assumption that I was of a higher social and economic standing than I was. Wang (2012) explores issues of informants not getting what they want from either the researcher or the research report and suggests that in some cases informants may feel that they are being used. That is, they feel they are being exploited to supply information, and get little in return. In the two instances above, I felt that these people were left disappointed by my perceived lack of willingness to help them.

I had rather naively imagined that I would observe the actions of ENGOs and schools without being too involved. I did not want to be ‘colonial’. I had seen many foreigners come to Yogyakarta with the best intentions to fix things and in the process insult local people and overlook local knowledge and skills. I certainly wanted things to improve, in the sense that I wished for positive environmental and educational outcomes as a result of the EE programs, but I did not want to tell people how to do it. I was hopeful that the work being done would be excellent and inspiring and I could admire everyone’s
work with my notebook in hand. While I hesitate to draw comparisons of my field work to that of Nancy Scheper-Hughes, like her, I realised that my reluctance to be actively involved was drawn out of an anthropological desire to sit back and watch, but soon came to the realisation that ‘there was little virtue in false neutrality’ (Scheper-Hughes, 1995:411). This was particularly true for me when observing the efforts of the staff and volunteers of COP. It felt morally wrong to take the privileged position of a (falsely) neutral observer and not to offer help where I could. So I did. Green Action staff made it clear that they wanted to get the most out of having me research them, for the organisation and for EE in Surabaya and I was happy to oblige. Centre for Orangutan Protection staff were a little less straightforward, but felt confident to ask more as time went by. I tried to support the ENGOs and schools through learning and teaching opportunities where possible, as outlined below.

Centre for Orangutan Protection (COP)

In the early part of my research with COP, I was a participant in their training sessions and a participant observer of school education visits. Although I enjoyed this time spent with my new friends, I felt like I was doing them and the orangutans a disservice by not offering help where I could see opportunities. As time went by, more and more opportunities arose for me to assist COP. I ran various EE workshops for staff and volunteers, translated documents, set up a list of native English-speaking volunteer translators, advised them on developing an EE strategy, facilitated contact with other organisations (such as volunteer agencies), accessed a donation of medical equipment for orangutans and delivered it from Australia to Yogyakarta, set up and co-delivered a six-week EE program at The Community School, solicited donations from The Community School, and attended a volunteer forum with COP at Yogyakarta’s biggest university. These activities were in addition to attending and buying tickets and merchandise for numerous COP events.

Green Action

Green Action was not so interested in benefiting from my expertise or experience in EE. (I have worked in EE for the past 11 years and as a consultant for the past six). Green Action saw me as an opportunity to open some doors for the organisation, particularly in schools that had been unwilling to join Green Action activities. They took me to a couple of such schools and asked that we had access to the student bodies on the basis of my research. On each occasion we were granted access by the school principal, after differing levels of negotiations from which I was generally excluded. They also saw me as a reward that they could offer schools. I was taken to various schools that were not senior high schools because Green Action felt that the school needed to be recognised for this work or needed motivation.
I felt that my foreignness and whiteness were given more value in Surabaya than Yogyakarta. I often felt that I was asked to meet people and attend functions, not because I was a researcher interested in EE or because I had some expertise in EE, but because I was Caucasian and that in itself would draw attention to Green Action and afford them additional status and prestige. Green Action utilised the prestige that was associated with my appearance and advertised my presence at upcoming workshops (with photographs of me), asked me to present at multiple schools and workshops that were not on the original agenda, and took me to schools that were not connected to my research but were the schools of the children of a prominent sponsor of the program (a primary and middle school). They asked me to run an English session at the school of Green Action founder’s daughter (a private Islamic primary school), requested that I write an article for their website, judge various competitions, and visit a sick friend at his house. I acquiesced to all of the requests, as I was very aware of how much I was benefiting from being able to conduct my research with them. I also felt that I was gaining an insight into the strategies and relationships that Green Action used to advance EE in Surabaya. In addition to these activities, I arranged for Green Action to come to Yogyakarta and run a professional development workshop at The Community School with me.

Schools

Through my active participation with the ENGOs, I gained a great sense of achievement and often felt up-lifted and more positive as a result. In addition to giving me a greater insight into the organisations, I have no doubt this work made my research more meaningful and fulfilling for me. It also provided me with the opportunity to get to know some brave and inspiring environmental activists – people whom I admire and whose work I respect. This was very important in giving me a sense of balance. I found most of the educators in the schools that I observed to be uninspiring, and this made me lament at times the state and future of education in Indonesia. In addition to this, the apathy and disregard for the natural environment by the general populace and government were enough to make me despair for the future. Working with the ENGOs provided a dose of positivity that was needed to keep me from feeling that Indonesia’s educational and environmental future was indeed very bleak. I found myself less interested in helping the schools than I was in helping the ENGOs. It was not initially clear to me why I felt this way. On reflection, I think this stemmed partly from the apparent lack of concern displayed by some teachers and principals for their students’ education. I felt a level of resentment towards some of the teachers who appeared not to value their role as teachers. In instances where the schools seemed not to be doing the best that they could to provide a high quality education for students (by local standards), I was less inclined to want to participate and assist the school. There was also limited opportunity for me to assist the schools as the school leaders (principals and teachers)
showed little interest in this. Many seemed resigned to the fact that the education system was not as
good as it could be and were content to work within it, rather than trying to change or improve it. As
outlined in the previous chapters, much of this apathy towards teaching can be attributed to ‘civil
servant mentality’, Javanese values of knowing one’s place (sungkan) and accepting one’s fate (nrimo).

The Madrasah in Yogyakarta was not such a school. I felt that they were working hard to provide
students the best education that they could and they also acknowledged that there was room for
improvement. If there was opportunity for me to support them in some way, I did. When some
German academics were in town, I offered the school the opportunity to have them come and talk
about their experiences researching orangutan. Since the school offers German and English as second
language courses, the offer was gratefully received as it gave students an opportunity to speak to
native German speakers – something they have never had the chance to do before. We held seminars
for language stream and biology students at the school. I also connected the school to the Roots and
Shoots program in Western Australia with the hope that they could pair up with a Western Australian
school to carry out jointly designed environmental projects. Additionally, I invited them to come to
The Community School and share their EE experiences with the teachers there. This was warmly
received by The Madrasah, as it was an opportunity to gain credit through the Adiwiyata program and
also to gain prestige for the school as The Community School is an expensive, British curriculum school.
When I applied to The Madrasah for permission to conduct research at the school, they very politely
informed me that whenever they have someone come to the school, they ask for a donation of library
books and no other type of payment. For undergraduates they ask for books to the value of Rp100,000
(approximately AUD $8.50), for Masters students Rp200,000 and for PhD candidates Rp300,000. I
enthusiastically agreed to their terms and donated books to their somewhat meagre library collection
to a value way above the value that they requested. The SMA in Yogyakarta did not ask for anything
upfront, but asked me to bring meals and drinks for students participating in FGDs. On each
subsequent occasion the teacher in charge reminded me to bring snacks. I also donated books to this
school.

**Positionality in the field**

I found myself in the situation during my fieldwork where my physical (Caucasian) appearance made
it obvious that I was not Indonesian, yet I did not fit the common understanding of what a foreigner
is. I look like I foreigner, but I have a Javanese husband and mixed ethnicity children. I had years of
practice separating my identity as mother and wife from environmental consultant and researcher in
Australia. I felt that in order to be seen as a dedicated professional, it was important that I separated
the two roles on most occasions. I continued with this separation of roles in Indonesia, leaving my children with my husband whenever I was conducting research in schools (I sometimes took the whole family or one or two of my children to ENGO-related events). I had not considered that this separation would not make sense in different contexts, such as the schools, and would lead to misrepresentations. In some instances (outlined below) this situation meant that my research participants found it difficult to position me and, indeed, I stumbled when trying to position myself at times. I was used to being defined and positioned in reference to my husband and children in social contexts in Java, but I was unprepared for how much my family and gender would impact on my research experience. The following examples aim to portray how I stumbled through the positioning and re-positioning of myself in my fieldwork.

**Single white female or Javanese Ibu?**

Unlike some other ethnographers, I did not desire to be seen as ‘one of them’ when I was in the schools (Wang, 2012). From the many years I had spent in Java and with Javanese people, I knew that I would always be foreign and was comfortable with this. Even Javanese people from outside of Yogyakarta are considered non-Javanese to an extent. In fact, Yogyakartans delight in imitating the accent of non-Yogyakartans speaking Javanese. Being *asli Jogja* (a Yogyakartan native) is a source of pride in a city where a large part of the population is from out of town. It is the first question that I am asked, without fail, when someone learns that my husband is Javanese. Is he *asli Jogja*? I am usually met with scepticism and have to supply the name of the desa (village) in which he was raised and the kampung (neighbourhood) in which my mother-in-law lives. I have also been asked where he was born – which hospital. To me, it seems futile to try to be ‘one of them’ in a town where ‘they’ pride themselves on being a very distinct group. I was comfortable with my identity as a foreign researcher when I was at schools, and, for the most part, I was also comfortable with being considered a foreigner. Regardless of my experience and linguistic capabilities, being Caucasian, I am very obviously ‘other’. My appearance and the fact that I was a university student caused many misjudgements in the schools that made me feel a little uncomfortable at times (as discussed below).

My representation of myself was bought into question on my first meeting with the (then) principal of The Madrasah. Having spent many years in Yogyakarta with Muslim in-laws and Muslim friends, I felt quite comfortable entering The Madrasah. I had not given much consideration to how the school would perceive me or treat me as a non-Muslim woman. The teachers (male and female) were warm and welcoming. The female teacher in charge of the environmental program and two other teachers met me in the first instance. We spoke about my research project and my family and concluded the
meeting with the agreement that I would email all relevant paperwork to the environmental teacher and she would get back to me after seeking permission from the principal. After having received permission, I was requested to return to the school and meet the principal. At our meeting the principal asked very few questions about my research and focused more on my family situation. He wanted to know how I met my husband, where we lived, and other details I felt were rather too personal for such a meeting. I answered the questions as vaguely as I could, as I felt this line of questioning was irrelevant to my research. The principal then moved to the topic of my appearance. At the time I was wearing long pants and three-quarter length sleeves. He informed me that I had his permission to do research at the school but I had to wear clothes that covered up to my neck, down to my hands and feet; nothing tight fitting. He said that he would not insist that I wear a head scarf, but to be sure that I covered up to my neck (gesturing with his hands to his neck, drawing attention to his short-sleeve shirt that was open at the neck). He said he did not want to the students to get any strange ideas (pikiran aneh-aneh) from me. I believe that he was doing his job in the best way he knew how. I was momentarily infuriated and could not bring myself to speak to a man who had just insulted me: I felt he had suggested that I would corrupt his students with my mere presence. The two female teachers in the room laughed nervously at my reaction (silence) and tried to explain to me that this was important because I could influence the students. This did nothing to ease the situation. I nodded and thanked them for their time. After discussions with my husband and friends and reflections in my field diary, it became evident to me that my anger was not so much at being told what to wear (as I was already aware of those expectations and had planned to dress as such), it was the fact that I felt he had labelled me and that label was not accurate. This experience somewhat painfully highlighted that others’ initial perceptions of me were out of my control and re-enforced the importance of being in the schools long enough to build relationships and get to know one another well enough to move beyond initial perceptions. I returned to the school and started my fieldwork and was relieved to find soon after that the principal had moved on. My first meeting with the new principal was a thoroughly enjoyable experience based on conversations about education, values and the environment.

On reflection, it is easy to understand why I was often misidentified at Yogyakarta schools. Jay (1969) wrote that stable marks of worth which contribute to one’s social ranking in Javanese society include age, moral quality, occupation, wealth, education, style of dress, and accent. As I explain below, it was very difficult for the teachers to assign me a social ranking on these bases. I always arrived at the school alone on my motorbike. Many Javanese women are dropped off at work by husbands and sons, as motorbikes are often shared amongst family members. Although some women drive themselves around on motorbikes, it is not expected that a foreign woman would do this. Many middle and upper
class families (mine included) own cars and would choose to travel by car wherever possible. It was quite puzzling for most people that I did not have anyone accompanying me or driving me and probably led to the assumption that I did not have a husband or family member who could drive me and could not afford a car (as a student). Indonesian universities and workplaces usually have age restrictions on students and employees, meaning that university students are usually in their 20s. Although I introduced myself as a PhD student, the fact that I was a female student, on a motorbike without anyone accompanying me, most likely gave the impression that I was younger and less financially secure than I was. Many teachers also commented that I seemed too young to be married or have children. Because I was driving myself on the motorbike, I usually opted for long pants, rather than long skirts – unlike school teachers. It is highly likely that this also contributed to me being placed in the university student category (single, white female student), rather than the wife and mother (ibu) category. While Indonesians from outside Yogyakarta insist that my accent is very Javanese, it is clearly still a foreign accent. I am quite sure that all of this contributed to some awkward misjudgements in the beginning, but after a short while I felt very comfortable in the schools, and, in most instances, the schools seemed comfortable having me there. This initial discomfort could have perhaps been avoided by me introducing myself as a visiting anthropologist or by being more upfront with my personal situation and kinship connections through marriage (Jay, 1969).

My fear of being misidentified by staff and students (based on the above-mentioned factors) was realised publicly in the early days at The SMA. I had subconsciously decided that in order to be taken seriously, it would be best to stick to the topic of research and reveal very little of my personal life in any introductions (as per the norm in the Australian context). When introducing myself, I tried to be very precise and factual and provide all necessary information about my research project. This generally included my research topic, proposed methodology, home university and sometimes my Indonesian sponsor university. This backfired on me and I found myself in front of a year 11 classroom with a teacher encouraging students to ask me private questions, including my age, marital status and where I lived. I tried to dodge the questions as I felt it would be quite unprofessional of me to give all of this information to a class of students. No-one seemed to care, and the teacher tried the same trick in the next class. By the third class I included these details in my introduction to avoid the embarrassment of having 16-year-old boys asking me if I was single (with the teacher’s encouragement). My discomfort was really the result of my own doing, as I was trying to do the introductions my (Australian) way, rather than the Javanese way. Javanese people like to find things in common when they meet someone new. This is usually done by enquiring where you are from/

46 See Djajadiningrat-Nieuwenhuis (1987) for more on ibu and the role of women in Javanese society.
where your family is from and failing that, where you live now or perhaps which university you attend. This line of questioning will usually provide an avenue to some common ground – a mutual friend, a relative who lives close by or someone they know who has or would like to study at that university.\textsuperscript{47} I knew this and was used to it in social settings, but in my quest for respect and fear of being misjudged, I resorted to my Australian ways. For teachers meeting me for the first time, it was difficult to find common ground with me, as I was presenting myself as a researcher and not an \textit{ibu} (wife and mother), or a potential neighbour. I quickly realised that no-one was particularly interested in my research questions or methods; what gave me the social capital and the level of respect I was chasing was the fact that I was married to a Javanese man and had three children – I was an \textit{ibu}. Once these facts were established, it was easy to find mutual ground and teachers were visibly more at ease with me. They could position me in terms with which they were comfortable – \textit{ibu}. I soon became comfortable with my marital status being included in introductions. For example, one teacher introducing me to another, ‘\textit{Ibu Retno, this is Mbak Kelsie, a PhD student from Australia. She is fluent in Indonesian. Her husband is a Yogyakartan local.’} ‘Oh really? \textit{Jogja asli?} Where in Jogja is he from?’ I never really felt comfortable with people implicitly attributing my relative fluency in Indonesian to my husband, as I had studied it for many years before I met him, but in efforts to keep everyone feeling comfortable, I chose not to point this out.

The impact of a (non-anthropologist) spouse on fieldwork is a subject lacking attention in anthropological literature (Gottlieb, 1995). In my experience, the mere mention of my husband’s existence provided me social capital and helped my research participants to position me favourably. In addition to this, he assisted me with written communications (often checking emails and text messages before I sent them), my translations and, perhaps most importantly, offered a sympathetic ear and rational advice at times when I felt frustrated and even hostile towards a particular informant. Without his presence, support, and ‘insider’ knowledge of Javanese culture, my data and my interpretation of data would not have been anywhere near as rich and insightful.

I constantly encountered assumptions by teachers and students that I would not know or understand something that seemed very clear and obvious to me. This was usually around social norms and the assumptions that I felt were made as a result of my appearance. As outlined in Tanu and Dales (2016), my cultural fluency was misjudged based on my Caucasian appearance. An obvious example of this

\textsuperscript{47} A teacher came rushing up to me one morning to inform me that another teacher (Pak Amin) knew my husband. This generated much excitement among the staff. Pak Amin was brought to me and we made small talk for a little while about my husband’s family before parting ways and leaving everyone satisfied that we had found a connection.
was how teachers would often use phrases like, ‘In Java we say... Javanese people believe that... In Islam we believe...’ then describe very basic things that I already knew. I often had teachers say something in Javanese to students and then turn to translate it to me, when I had understood it the first time. I usually did not point this out, as I did not want to cause embarrassment for the teacher or have to endure having them try to make me speak Javanese for their entertainment.

Positioning myself did not seem as difficult with the ENGOs as it was with the schools. This may have been because I had met the founders of both of the ENGOs in Australia. In both instances I was with at least one of my babies (therefore obviously an Ibu) and when meeting them was introduced as ‘Kelsie who works in EE and will be doing her PhD in Indonesia’ and ‘Kelsie who is a volunteer of ours and will be your translator’ (a professional researcher). The duality of my roles seemed natural and obvious. By meeting them in an Australian setting, I was not particularly ‘other’ in the sense that I was not the foreigner. There were many clues as to my status and both of these men had spent time in Australia and therefore knew other Australian women. When we met again in Indonesia, these two men set the tone for the rest of the ENGO staff. COP welcomed me immediately and invited me to their annual COP school, which meant that at its completion I held the somewhat esteemed title of COP School Batch 4 alumnna. While it took a little longer to get to that place with Green Action, I soon found myself being called Kak Kels (big sister Kelsie) and on occasion being introduced as the big sister of some of the younger Green Action team.

**Conclusion**

This chapter presented in detail the methodological approaches used in this study, in each city, with each group of respondents – schools, ENGOs and government officials. It outlined the reasons for site selection and the mixed methods approach to data collection. It also covered the ethical considerations, the challenges and benefits of being non-Javanese and the unavoidable impact that culture has on every interaction in the Javanese context. These considerations are important in any ethnographic study, and in this study, they lay a foundation for the reader to understand how culture impacts not only foreign researchers, but also EE efforts and the broader education system. The next chapter presents EE efforts in Yogyakarta, the ‘student city’ and home of Javanese culture.
Chapter Five: EE in Yogyakarta: Adiwiyata, ENGOs and a lack of government support

Introduction

In my early research proposals for this study I drafted six questions related to EE in Indonesia that I hoped would be the foundation of my research. These questions were:

1. How are EE programs delivered in six senior high schools?
2. How do Indonesian educators and students define an effective EE program (and how does that compare to other definitions)?
3. What were the factors that led the schools to introduce an EE program?
4. How do environmental Non-Government Organisations (ENGOs) – both Indonesian and transnational – create and implement EE programs in senior high schools?
5. What factors account for the differential effectiveness of EE programs by ENGOs and schools?
6. How can future educational programs be designed and implemented to contribute towards the formation of active environmental citizens in Indonesia?

The first two questions highlight my optimism that there would be six senior high schools in Yogyakarta with strong EE programs. I was also optimistic that educators and students would value EE as a transformative educational discourse and practice and be able to define what makes it ‘effective’. What I did not conceive was that the schools might be using EE as a vehicle for a purpose that seems unrelated to both environmental and educational outcomes.

This chapter describes the EE programs at two senior high schools in Yogyakarta and depicts how the schools have reduced the Adiwiyata Program to little more than signs and numbers for reporting purposes. The chapter then provides an overview of Yogyakarta-based ENGOs which offer EE to schools and goes on to describe the educational approaches used by the Centre for Orangutan Protection both with its own volunteers and with schools. The chapter finishes with observations of local government approaches to the Adiwiyata Program and discusses how a perceived lack of educational value and a lack of support from government has resulted in a poor regional representation in the Adiwiyata Program and a symbolic and rather hollow approach to EE in the two schools.
EE in Yogyakarta Schools

Adiwiyata

The Adiwiyata Program is an EE program that was created by the national Ministry of Environment and introduced to 10 pilot schools in 2006. The Program has since grown to include schools from across Indonesia. The program aims to:

1. increase the capacity of schools to become Adiwiyata Schools or schools with environmental concern and culture;
2. increase institutional capacity and human resources in the management of the Adiwiyata program; and
3. continuously improve Adiwiyata Program management at the provincial and district / city level, including schools and surrounding communities (Kementerian Lingkungan Hidup [Ministry of Environment], 2013) [own translation].

As outlined in Chapter Two, the Adiwiyata Program favours building the capacity of the school, and of the different levels of management to bring about change, over empowering learners. The silence around ‘the environment’ is significant, and a lack of concern for environmental and educational outcomes is evident not only in the aims of the program, but also in the application of it by the two Yogyakartan schools in this study.

The Adiwiyata Program is highly prescriptive. Schools are scored (usually 0 - 5 marks) for actions related to areas of policy, curriculum, participation in activities and environmental management. Within these areas there are specified standards, stages of implementation and achievement. Standard B1 for the curriculum area calls for educators to ‘demonstrate competence in developing environmental education activities’ (Kementerian Lingkungan Hidup [Ministry of Environment], 2013:36). Schools are awarded two points if ‘70% of educators develop [educational activities for] local and global issues related to the protection and management of the environment’ (Kementerian Lingkungan Hidup [Ministry of Environment], 2013:36). This example is one of many within the Adiwiyata Program Manual which focuses on teacher capacity and school management of the environment above all else, with a reliance on figures and numbers to achieve the standards. This goal is positive and, if achieved, has the potential to dramatically improve the amount of EE being taught in classes. In order for this to occur, however, teachers require training and development in this area from MOEC.
Both of my Yogyakarta schools had achieved national level Adiwiyata status at the time of my research. This meant that they had progressed through various levels of the program (school, district or city, province) and were working towards attaining the highest level – the Independent level Adiwiyata Mandiri. In order to attain the national level of Adiwiyata, they had to have scored at least 90 percent by a judging committee on meeting the standards outlined in the Adiwiyata Program Manual. In order to have met this standard, both schools would have had to, amongst many other things, demonstrated that 50 -70 percent of their teachers had prepared lesson plans related to environmental management and protection (Kementerian Lingkungan Hidup [Ministry of Environment], 2013:23 & 27).

During my fieldwork, teachers made a clear distinction between ‘academic’ (assessable, quantifiable, likely to be in exams) and ‘non-academic’ (not assessable, not quantifiable, unlikely to be in exams and therefore not valuable) activities. Environmental actions associated with the Adiwiyata program (composting, recycling, etc) were always considered ‘non-academic’ by teachers and therefore lacking real value and taking time away from ‘academic’ pursuits. Indeed, the way that the activities were conducted offered little educational value for students. This meant that EE was an unvalued ‘add-on’ for teachers who were already struggling with an extremely crowded curriculum as well as a major change in curriculum. The Adiwiyata program offered very little quantifiable educational value and was therefore often seen as a burden. This was particularly the case for high achieving academic schools.

Since both schools had achieved the Adiwiyata national level, I was expecting to see a strong commitment to the environment and EE by the staff and students. Instead, what I found was an ad hoc approach that focused on reward and prestige over action, where one or two teachers controlled and ran the program, in which the role of the students was reduced to being the labour force to carry out activities or make up participation numbers that would score the school Adiwiyata points. Like the general education system in Indonesia, the Adiwiyata Program has a very strong focus on scoring and assessment. Unlike the general education system, the Adiwiyata Program focuses on assessing teachers’ capacity to meet the standards, rather than student capabilities. My descriptions in the following sections demonstrate how the schools are using the Adiwiyata Program to achieve high rankings and prestige and yet are failing to provide students opportunities to meaningfully engage in EE.
The SMA

The SMA is not a high-achieving academic school and could be described as lacking cultural capital (as described by Bourdieu (1974)). This lack of academic achievement and cultural capital was the result of inequalities in the education system. The school’s lack of cultural, economic and social capital can be directly linked to the (current and former) principals’ lack of social capital. Students’ families are also of modest capital, making it difficult for the school, its principal, teachers and students to increase their capital. Adiwiyata is seen as a means to increase symbolic capital in the form of prestige.

If we compete on academic ability, our school will lose against city schools. So the other benefit of Adiwiyata is that it can lift us up. If it’s an academic activity, we will clearly lose against other schools that are favourite schools, that have better thinking and better processes. We can be lifted up by Adiwiyata.

(Teacher, The SMA, interview 23 April 2015)

In 2011 The SMA was informed by the District Head (Bupati) that it would become an Adiwiyata school in order to make a name for itself. A teacher at the school described the decision as being forced on the school, whether the teachers wanted it or not (mau, nggak mau, terpaksa). This teacher told me that at that time the school was in a state of disrepair and was dry and dusty with no trees. In the three years since being forced to join the program, the school has made itself ‘green and clean’. At a school learning exchange day, the Sociology teacher explained this transition to visiting teachers and students. He first showed photographs on a big screen that depicted a dusty school with no greenery, grounds of dry, swept dirt and a canteen that was a construction of some metal sheets held up by wooden stakes in a dirty, dusty outdoor environment. He then showed pictures of the school as it currently is, with a new canteen, a new sick bay / health unit, and many trees and grass where there had been dirt and dust. ‘We did this in three years’, he proudly announced. ‘We were forced’. He told us that now the school is quite famous (agak terkenal). The teachers were not embarrassed or resentful for the forced changes, but were proud of the improved conditions and the symbolic capital that came with them.

48 For instance, a teacher at the SMA informed me that the school was only able to borrow money to upgrade its canteen, health unit (UKS) and assembly area because the previous principal had a friend who worked at the bank and helped them to access a loan.

49 The District Head is responsible for appointing school principals in many districts (Pisani, 2013; Rosser & Sulistiyanto, 2013).
The Adiwiyata Program is open to year 10 and 11 students and includes environmental cadets (kader lingkungan), nature lovers (pencinta alam) and an anti-illicit drug group (Gerakan Anti Napsa dan Psikotropika) at The SMA. The program is coordinated by one of the school’s Biology teachers, Ibu Widiya. Ibu Widiya somewhat reluctantly led the program, demonstrating very little enthusiasm for the program and offering many reasons why the students were not actively involved in environmental projects. As part of the Adiwiyata program, the students are meant to undertake weekly activities, including composting organic waste, maintaining the plants in the greenhouse, sorting and weighing recyclables and tending to the fish pond. Due to a lack of interest in Adiwiyata as an extra-curricular activity, these activities were scheduled to be undertaken during the Saturday morning clean-up sessions (Sabtu Bersih). During a FGD with the Adiwiyata students, I asked them if they had meetings and made any kinds of plans for environmental actions. The students looked left and right and seemed uncomfortable with my question before one student answered, ‘We have lots of meetings and make plans, but action is only an expression’ [emphasis added]. I never saw any students undertaking any environmental activities in my time at the school, but I did witness some discussions about doing things.50

The Madrasah

The Madrasah is a state Islamic senior high school for boys and girls, known as a Madrasah Aliyah Negeri (MAN) or Madrasah. The school is situated in the centre of Yogyakarta city and hosts 580 students and 60 teachers. It is in a heavily populated part of town, on a main road and has no garden or yard. The school administration is housed in a colonial-style building (from the Dutch era) with classes in the newer buildings, which are three storeys high. The mosque is separated into up-stairs (females) and down-stairs (males), as there is not enough room to fit everyone on one level. The canteen cannot seat all of the students, so students eat their lunch and snacks in the classrooms. There is no outside area in which students can sit, and the only open space is a paved area at the front of the school that is in full sun.

The environmental program at The Madrasah came about by accident. The school was punishing late and truanting students by having them wear orange t-shirts whilst sweeping the school grounds and cleaning up litter. The unintended consequence was that this orange shirt group became ‘cool’ (gengsi) and other students wanted to join the group. This group entered a school environmental

50 The school employed a gardener and had a rubbish collector who came regularly and dealt with the waste.
competition and was awarded first prize on the basis of its work keeping the school clean. Soon after
this, The Madrasah was instructed by the Ministry of Religious Affairs (MORA) to continue to build its
environmental program in order to build its reputation as a ‘green madrasah’.

In the past few years, many senior high schools (private and public) have been attempting to build a
reputation based on a specialisation. This trend seems to be increasing as a result of the national
government no longer allowing schools to have National Plus or International standard ratings.
Without these ratings, many schools have gone searching for new ways to distinguish themselves, to
build their social capital. Like The SMA, The Madrasah was ordered to continue with an environmental
program in order to build itself a reputation as a special type of school. Until that point, it was just a
madrasah; by joining the Adiwiyata Program, it had the opportunity to gain prestige in a non-academic
(and therefore less competitive) field.

The Adiwiyata Team

Ibu Eni is largely responsible for the Adiwiyata program at The Madrasah and is known as the leader
of the Adiwiyata Team. Ibu Eni was always present at more prestigious environmental events, such as
a learning exchange between teachers that I facilitated at my daughter’s school, visits from German
researchers and an NGO seminar held at a hotel, but rarely participated in the hands-on activities such
as the weighing of recyclables or clean-up mornings. In my early conversations with Ibu Eni, I was
under the (incorrect) impression that the Adiwiyata Team was made up of student representatives. I
learned during the course of my observations that the team consisted entirely of teachers and the
students were the environmental cadets (kader lingkungan). There was a clear distinction between
the roles: the team (adults) made the decisions and compiled documentation for Adiwiyata reporting,
and the cadets (students) did the physical work. Year 12 students were not permitted to participate
in the program, as they needed to focus on their academic pursuits. All student leaders (OSIS) were
required to participate as Agents of Change (organisers) for the Rubbish Day event (described
below).51

The only time that the students appeared to be afforded any agency was the Rubbish Day (Hari
Sampah) event. My observations of this day and discussion with two of the student organisers in the

51 OSIS is the Intra School Student Organisation. Each junior and senior high school has an OSIS group. Students
are usually selected by teachers (for their academic ability and general good behaviour) with representatives
from each year level. OSIS students are expected to be role models for other students, act as student leaders
and school representatives.
week following, demonstrated that the teachers at the school saw little educational and environmental value in the EE program and were reluctant to actively participate in a student-run event.

**Observations**

**Rubbish Day**

The Rubbish Day event was planned by an organising committee of 30 students who referred to themselves as Agents of Change (*Agen Perubahan*). The committee planned the day’s activities, obtained permission from the local police to walk around the block as part of a campaign and submitted a proposal for funding which was met by the school. The funding covered the cost of audio and stage hire and catering. The students had also planned host a question-and-answer panel with a local NGO, but this was cancelled and replaced with student and teachers singing because the NGO’s appearance fees were beyond the event budget.

On the Saturday morning of the event, male agents wore pink shirts and the female agents wore orange, while the rest of the students were in their Physical Education uniforms. Students told me that this was because the supplier of the new pink shirts had only sent short-sleeved shirts, so the girls had to wear the (old, long-sleeved) orange ones.\(^{52}\) The student organisers had name badges and walkie-talkies and were easily identifiable among the crowd. Various students and teachers proudly informed me that the students were ‘trusted’ (*dipercayai*) to run this event. These symbols (special uniforms, badges and walkie-talkies) and the use of language suggested that the agents had some kind of authority, but as the morning proceeded, it was clear that they had very little. This event was really about students performing, and in the process scoring some points for the Adiwiyata Program.

It took over 40 minutes for students to divide into class groups in preparation for a ‘healthy walk’ (*jalan sehat*). Many teachers were not in attendance (including Ibu Eni), and those who were there stood around chatting. The student organisers were repeatedly asking their peers to gather in class groups to no avail and on two occasions a student organiser requested assistance from teachers over the loud speaker to round up the students into class groups. Eventually, the principal came to the stage and restored order. It appeared that no-one was interested in taking orders from the student organisers, and teachers had no intention of assisting them. Students set off in their class groups for

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52 Female students were not permitted to wear short sleeves which would show their arms, as part of Islamic modesty.
the healthy walk. I asked some students why they were walking, and they told me that they did not know. Some classes were led on the march by a student holding an A4 piece of paper with a message on it, but I could not read these messages amidst the sea of students.

After the walk, there was a concert where students, teachers and canteen vendors all joined in performing songs that had no relevance to the environment. During this time (approximately two hours), I sat and observed and chatted at length with one teacher about EE. While the concert was underway, some classes participated in a rubbish relay where students ran to put rubbish in the correct bin (organic and inorganic), and a few students competed in a ‘re-use’ competition. The day ended with students eating together – catering by the school canteen was over-packaged and used all disposable food containers and utensils – and door prize winners were announced. As I walked back through the school to the parking area, I noted that there were no teachers to be seen and students were hanging out in groups far from the activities. Before I left, one student said (in front of the main student organisers), ‘I want to go home. We’ve been here since 7am. We have to wait till 12’. The organisers were sweaty and were no doubt very tired after a long morning in the blazing sun. I felt this way and assumed that most of the students did too. It certainly was not a morning of environmental inspiration, but more a morning of symbolic gestures. I assumed that this event would score well for the Adiwiyata Program, as all 580 students had ‘participated’.

Bjork (2005:xiv) writes that he was unprepared for what he saw in six Indonesian junior high schools (SMP), but it was not the poor quality of facilities or the poverty of some students that shocked him: it was the ‘framing of professional responsibility’ – the ‘remarkably casual attitude toward instructional duties’, and the focus on school rituals such as flag-raising ceremonies. The more Adiwiyata activities that I witnessed at my two Yogyakarta schools, the more I felt that I was witnessing symbolic gestures. Where Bjork had seen flag ceremonies, I was seeing ‘clean-up activities’. These activities, like flag-raising ceremonies, offered little educational benefit to students, but provided symbolic capital and opportunity in the form of Adiwiyata points and teacher career advancement. Like flag ceremonies, Adiwiyata activities were an opportunity for teachers to demonstrate their loyalty and commitment (to the Adiwiyata Program) without having to do anything that was too challenging or time consuming.

Various teachers had complained to me about the heavy documentation requirements of the Adiwiyata Program. I found it puzzling as to why the students were not involved in the documentation of their activities. Other teachers later suggested to me (somewhat apologetically) that the Adiwiyata
teachers did not want the students involved in documentation because this would have meant that they could not report it as they wanted to (e.g. by embellishing the number of participants). By handing over responsibility to students they would also be foregoing opportunities to make themselves look good. After a few months of observing the school and interviewing teachers from various schools, I came to believe that this was indeed the case. After conducting an interview with a teacher from a different school (that took 40 minutes), I received a text message from the teacher asking for a certificate from my university so that she could use it in her application for promotion. When I told her that I could only provide a letter of thanks, she made her dissatisfaction clear. Even after I had sent the letter of thanks, she continued to send me messages expressing her dissatisfaction. Another teacher asked me to provide her with a table outlining all of my visits to the school and any photos that I had of students doing things, so that she could include it in her next Adiwiyata documentation submission. I was almost always photographed when visiting schools, and many of the schools mentioned that ‘this’ would go in their Adiwiyata documentation. I slowly came to accept that the point of the Adiwiyata Program for these two schools was about advancing through the rankings and in doing this, providing opportunity for teacher career advancement and increased prestige for the school. The Adiwiyata Program was providing ongoing opportunities for teachers and schools to increase their social capital. This was only relevant and of interest to schools which were lacking social capital.

Almost two weeks after the Rubbish Day event, I was scheduled to hold a FGD with the student organising committee. Only two students came. I felt sorry for these students who had dedicated a lot of time and energy to running the event and felt unsupported in their efforts. One of the students, Imam, was reflective and showed some disappointment at what had been achieved that day. He acknowledged that the Agents of Change had ‘made some progress’, but had run an event that was ‘not very interesting’ and ‘had a lot of rubbish’. He told me that it was ‘hypocritical to have a day to reduce rubbish and then to produce more’. Imam felt that the amount of catering waste that resulted from the day was greater than the amount of waste that would have been produced by the school on a normal day.

One of the objectives of the 2013 curriculum for senior high schools is to have students who are responsible and pro-active and part of the solution to environmental issues (Kementerian Pendidikan dan Kebudayaan [Ministry of Education and Culture], 2013). In this instance, it appeared that the curriculum and Adiwiyata Program were failing the students. The two boys also shared their
disappointment at the lack of participation by other students and the canteen which had provided the packaged food and the main source of waste for the day.

Yeah, what can you do, Miss? Actually it’s quite difficult. We have to relate to those outside, so sometimes our intentions are good, but they’re not well received by the canteen people. Because if it’s us [students] doing the reminding, sometimes they’ll question, who are you [to say such things]?

(Imam, student organiser, FGD, 5 March 2015)

Although the aims of EE are varied, it is widely agreed in literature on EE in the Global North that EE should aim to develop the agency of learners in participating and taking action on environmental issues (Stevenson, Wals, et al., 2013:2). The Rubbish Day event was the only time I witnessed an attempt at a student-led activity in Yogyakarta. It was celebrated by staff and students as an action-oriented activity – a special event where students were ‘trusted’ to make the decisions and run the activities, but the teachers, canteen contractors and other students were unwilling to listen to or take direction from them. In order for this to happen, it would have required a shift in well-defined and reinforced roles. Such a shift is difficult to achieve, even on a temporary basis, for a variety of reasons, including cultural values and traditions of power. See Chapter Seven for more on this.

At the start of the Rubbish Day event, there were many teachers visible, clustered undercover with me (out of the sun). Some asked for photos with me before most disappeared. One English teacher stayed with me and chatted at length, and a few male teachers came back to join in singing on the stage after the long walk. Generally, the teachers were not visible and even when asked over the loud speaker, they were not forthcoming with support for the event. The English teacher told me that the event was good to keep the students interested and their motivation up, but seemed to think that that was about all it was good for. After observing the day, I question whether it was useful in keeping students interested and motivated. I saw little motivation generated out of the event and, in fact, thought it seemed to exhaust the students who ran it and somewhat deplete their enthusiasm, particularly when considering Imam’s reflections that the day was ‘hypocritical’ and ‘not very interesting’. I felt sorry for the students who had worked hard to arrange and facilitate this event, but what I found more disappointing was the message that the staff gave through their lack of support: that this event did not matter. It seemed that the staff and principal were content to write off the morning as a morning for the students (I argue in Chapter Seven that events like this may do more damage than good) and an opportunity to get Adiwiyata points. The English teacher noted some
missed opportunities (the songs should have been about the environment, the point of the healthy
walk was to pick up rubbish and should have been made clear), but even he did not seem to share in
my disappointment at what a missed opportunity it was. I felt that this morning could have been the
start of some long-term actions, some inspiring outcome-based projects, if only there had been some
teachers with an interest and capacity to support it. Over the course of my fieldwork, I saw many
opportunities both inside the classroom and outside where meaningful EE could have occurred, but
instead I saw ritual and ceremony that met the requirements of the Adiwiyata program.

Environmental lessons

Despite curriculum changes, the education system in Indonesia is still based on exams, rankings and
results for each subject. This approach to education fails to offer students the opportunity to involve
themselves in the deepest problems of society. Instead, it focuses on transferring and assessing
retention of ‘facts’. Giroux (1999) argues that the key to students acquiring the knowledge, skills, and
ethical vocabulary necessary for the ‘richest possible participation in public life’ is participation in the
deepest problems (Giroux, 1999:146-147 citing Havel 1998:146). The Adiwiyata program could enable
such participation, but teachers would be responsible for facilitating this. My experiences in
Indonesian schools suggests that most teachers do not possess the skills or desire to do this, and those
few who do struggle to do so inside the classroom because lessons are focused on covering
examinable material, not ‘additional’ material relevant to the Adiwiyata program. This situation is
consistent with Gruenewald’s (2004:74) argument that efforts to integrate environmental education
activities into schools, though noble and not insignificant, are dwarfed by the power of the dominant
educational discourse, which serves different, arguably anti-environmental, ends.

Environmental issues are almost non-existent in the curriculum and are rare in textbooks in Indonesia
(Parker, 2016). Despite this, and perhaps in an effort to bring EE into mainstream education, the
Adiwiyata Program requires national level schools to integrate environmental themes across the
curriculum. Teachers at my two schools knew that they should have been integrating ‘the
environment’ throughout the curriculum and as part of their Adiwiyata Program, and they reported
doing so. Both schools had lists of subjects into which they reported integrating environmental
teaching. The reality was very different. The Head of Curriculum at one of the schools explained to me
that this integration was very difficult, as teachers did not know how to integrate environment into
their subjects, they did not have enough understanding of environmental issues, they taught directly
from the subject textbook, and were not confident to teach in a new way (critical thinking, action-
oriented).
As discussed in the previous chapter, teachers were reluctant to commit to a time to have me observe their class. My aim was to observe classes that were related to ‘the environment’. This meant that I was open to observing any class, any subject on any day, as long as it was somehow related to ‘the environment’ (lingkungan or lingkungan hidup). It should not have been a difficult request, as both schools reported integrating environmental issues across the curriculum as part of the Adiwiyata program requirements. Despite this, teachers were very reluctant to have me observe their classes. On various occasions teachers apologised to me in advance of the class for the ‘boring’ teaching, ‘monotone’ approach and ‘theory with no praktek (practical or hands-on)’ that I would witness. The teachers acknowledged that they felt uncomfortable having me observe them because they were not ‘yet’ teaching the way they should (as defined by MOEC in line with the new curriculum). Over the course of my time at the schools, I observed Biology, Geography, Home Industry (Prakarya) and Chemistry classes at the two schools.

I observed five Home Industry classes at The SMA as part of the 2013 National Curriculum, before the school reverted back to the 2006 curriculum, and the subject was no longer offered. In four of these classes, students were told to go outside to the mushroom hut. One by one, students brought their log (from which the mushrooms would grow) to the teacher. The logs were inspected by the teacher, and students were instructed to spray them. Occasionally the teacher would tell a student to break a dry bit off the log or to open the plastic cover a little bit more. Not once were the students told why they should do something. On the odd occasion that a student asked a question, the teacher would avoid answering it.

Student 1: How come they [mushrooms] grow differently, Miss?
Teacher: Yeah

Student 2 (to teacher): There is no sign of life.
Teacher: silence

Student 3: Why is it that it can go mouldy, Miss? [Asking about a log that has gone slimy and mouldy]
Teacher: Yes, it can. (Ya... bisa.)

Student 3: What’s in the sprayer, Miss?
Teacher: Water.

**Me to student:** Why is this dry? [The log]

Student: I don't know

The students demonstrated very little understanding of what they were doing and why, and the teacher appeared to have no desire to explain it to them. Students who had successfully grown a mushroom were instructed to pick and weigh it. When we returned to class, all students were told to note down any changes in their exercise books. Most students wrote nothing. I felt that what I was observing was quite far from EE, but was aware that my interpretation of EE could be vastly different from that of the teacher and the students. In order to clarify this, I asked the teacher and some students how these activities were related to EE.

**Me to student:** Does this activity have a connection to the environment?

Student (male): Yeah, we clean the dry bits off [the log] on to the ground, then that gets cleaned up.

This student had applied the commonly promoted concept of ‘green and clean’ to what he had just experienced. But in order to make sense of it, he had to litter first, so that there was something to ‘get cleaned up’, presumably by the gardener.

I asked the teacher if there was a connection between this activity and environment. She told me that there was a connection because the logs were made from wood offcuts. During another class a few weeks later, I asked her how growing mushrooms was related to EE. She told me, ‘We learn how to use nature in our area’. Observing these lessons, combined with conversations I had with the teacher and students gave me the strong impression that there was not an issue of differences of interpretation about what EE was. This teacher (an IT specialist) really did not know what EE was and was there teaching Home Industry because someone had to be. I was not convinced that anyone actually believed that this lesson had anything to do with EE. I felt that the school was obliged to meet criteria for the Adiwiyata program, and this somehow met those criteria. Much to my bemusement,

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53 The teacher and I had conversations about mushroom growing and despite her silence with the students, she had experience growing mushrooms with her family and could easily identify what the students needed to do to their logs to get the mushrooms to grow. When I told her of my failed attempts at home, she informed me that a garage, although dark, is too dry, and I needed a more humid place to keep my logs.
using natural resources had become EE. This is also evident when observing school text books and the 2013 curriculum which has it as a theme.

With the exception of one Biology class, all other classes that I observed at both schools were as follows: teacher disseminating information to students and asking for an occasional response from (mostly male) students to indicate that they understood. The teacher would say something like, ‘The natural environment is very import...’ and students would reply ‘...ant’. The teacher would then nod with satisfaction at the students’ demonstration of their ‘comprehension’.

The not so exceptional Biology class – The SMA

There was one class that I witnessed which was different to the others. This class was in some ways exceptional, in that it encouraged students to find answers in nature. The exceptional year 10 Biology class started as others had. The teacher asked me to introduce myself and informed the class that I could speak Indonesian. During my brief introduction I explained that I was there to observe and would try not to disrupt their class. While I was explaining this, some girls squealed with delight at my presence (and possibly language ability) and a female student called out, ‘You’re beautiful’. These kinds of antics usually came from the boys, but with two-thirds of the class female, it seemed this class had some brave young women in it. I moved to the back of the class where students could not watch me and I could also focus on the events happening in front of me. There were 29 students in the class, all wearing uniforms: 19 girls, 17 wearing the hijab (jilbab), seated in single-gender pairs at the old, hard wooden tables and chairs. The teacher, Ibu Dian, began the lesson on eco-systems. She reminded the students that they are an Adiwiyata school (for my benefit I presume) and asked them to discuss the important parts of an eco-system. I heard a few mumbles, but there were no discussions going on. The students appeared to be waiting for Ibu Dian to tell them what the important parts of an eco-system were. Ibu Dian then wrote up the parts of an eco-system under the terms **biotic** and **abiotic**. Part way through her explanation she asked the students where humans sit. The students were silent and gasped when she pointed to the word ‘animals’. Ibu Dian often left words unfinished for the students to complete: ‘inter..’ ‘action’, ‘commun...’ ‘ity’ and said **paham, ya**, not so much asking the students if they understood, but more inviting them to say that they understood. Compared to other teachers whom I observed, Ibu Dian was a little more engaging with her tone of voice and occasional light-hearted comment. She also tended to engage the female students more than other teachers.

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54 These students (almost all Muslim) would have been taught in religion lessons that humans are the highest form of all creatures and are the perfect creation. To be put in the same (low) category as animals would be shocking.
who, despite having a majority of female students in the class, clearly focused their attention on male students. Ibu Dian also paused and invited students to focus on her again (kembali lagi) when students stopped listening and started chatting amongst themselves.

Those techniques make Ibu Dian an engaging teacher by local standards. Even so, I was struggling to focus in a hot, muggy, after-lunch class. Much to my delight, Ibu Dian announced that we would go outside to continue the lesson. Students all listened as she explained the task: groups of students were to go into the school grounds to find answers for their worksheets. She sent groups to the greenhouse, the fishpond, the back pond / reflection area, near the mushroom hut, east of the library and in front of the assembly area. Students were asked to fill out details in their worksheets on what type of creatures they could see, what role the creature plays in the eco-system and how many they saw. I followed a group of four girls who enthusiastically filled in their sheet and told me that they find it ‘refreshing’ to go outside for lessons and that it helps them to ‘understand directly’ (langsung mengerti). I then chatted with Ibu Dian, asking her the benefits of taking learning outside. She told me that ‘it’s fresher and cooler’ for the morning classes, but hotter for afternoon classes. I was not surprised by her identifying temperature as the main benefit for being outside, but was somewhat disappointed that she had not identified any education-related benefits, such as increased levels of interest, engagement with nature, enquiry-based learning or the like. I felt that Ibu Dian was doing well to make the most of the outdoor learning opportunity, but by her own admission, her use of the outdoors followed the curriculum and was an exercise suggested by the text book. As a result, this was a good lesson about the environment. It was not however, a lesson for the environment and is therefore not what I consider EE.55

After returning to the classroom, the students sat in groups and discussed their answers. The group of students that I observed struggled to identify the role of the abiotic and biotic organisms, but they were doing their best to hazard a guess. Ibu Dian moved around to each group, checking their work and commenting before handing out marked test scores and dismissing the class. The students had not completed their worksheets when dismissed.

Upon reflection, this class stood out from others. It was not exceptional, but it was different in that Ibu Dian facilitated inquiry in nature and engaged all of the students in the class. I had seen other classes move outside (see the Home Industry example above), but the students were not encouraged

55 See Chapter Three for definitions of EE and discussion of the role of education for the environment as opposed to education about the environment.
to seek answers from or related to nature. I had also seen some engaging teachers, but, unlike Ibu Dian, they tended to focus on the boys, not the whole class; like Ibu Dian, they taught about the environment. With the exception of a Geography teacher at The Madrasah, I never witnessed a teacher encouraging students to identify problems, find solutions or even consider that they might have a positive role to play in solutions to environmental problems. This, however, is not a criticism of the teachers, but more a criticism of the broader education system which values knowledge retention and examination scores above all else.

(A lack of) environmental activities, even less understanding

I never witnessed what I would classify as *environmental activities* at The SMA. I witnessed activities such as emptying bins, sweeping the grounds and trimming plants, all of which I consider a normal part of running a school. The terms ‘green and clean’ are often used for environmental programs in Indonesian schools, and on many occasions teachers listed clean toilets and clean canteens as part of their environmental projects (these are also included in the Adiwiyata Program).

Upon entering The SMA, there are small signs reminding students to conserve water and put rubbish in the correct bin. Observing these actions was somewhat challenging. Although the school had separate bins for paper and plastic, they were usually filled with mixed rubbish. The environmental activities that the school claimed to undertake include: separating and selling used paper, plastics, and cardboard, growing plants (including some rare species), making compost, conserving water, using *biopori*, as well as a range of awareness-raising activities.  

There was evidence of previous attempts at these environmental activities and the infrastructure remained in the form of a custom-built composting area, shredding machine, separate bins and a waste collection system. The reasons that the school offered for its lack of action varied: at the beginning of the school year I was told that the school would be focusing on socialising the program first (awareness raising), and therefore there was nothing for me to observe; later in the semester I was told students were preparing for mid-semester tests; next it was a busy time for other extra-curricular activities (so no one had time for environmental activities); and finally it was close to the end of the year, so students needed to focus on their studies.

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56 *Biopori* holes are holes that are fitted with piping, usually one metre deep and 10cm across. The holes are often filled with organic waste (leaves) and act as an avenue for rainwater to return to groundwater. They are particularly useful in built-up areas where there is little unsealed land and high instances of flooding.
Every school and most government departments hold a weekly clean-up session. This is usually Friday clean-up (Jumat Bersih) or Saturday clean-up (Sabtu Bersih). In schools, one teaching period is set aside for the students and teachers to clean the classrooms and school grounds. Although these sessions are on the weekly schedule, they are often cancelled to make time for other activities such as exam preparation and school celebrations. Both schools claimed that this clean-up time was the time that their Adiwiyata activities were carried out. The sessions were very similar at both schools. During the clean-up period, most students hung out in small groups inside or outside of their classrooms or at the canteen (although this was not permitted). It was largely the Adiwiyata team and a few other conscientious teachers who oversaw the activities. Student groups were usually defined by gender and often a ‘girls group’ and a ‘boys group’ would come together, and lots of teasing and laughing would ensue. Occasionally, a boy-girl couple would be spotted sitting and talking, but this was rare. On one occasion, I watched as a group of nine boys returned to the school, having been off site to purchase snacks and drink tea. This too was not permitted, but teachers turned a blind eye. In fact, most teachers were gathered in the staff room eating fried snacks, drinking tea and socialising.

The cleaning duties were usually left to one or two students. It was usually girls who swept the floor, whereas boys cleaned windows and another couple of students took bins to be emptied. There was no schedule for this; students told me that they took turns. The canteen was busy at both schools during this period, with students taking advantage of a lack of supervision.

The Madrasah did not have any gardens, and, apart from the sweeping and cleaning, the major event during the clean-up sessions was the recycling bank (bank sampah) being open. One teacher was responsible for weighing recyclables (paper, cardboard and clear plastic bottles), while another wrote down details, such as the date, where the waste came from (which class or department) and how much it weighed. Occasionally, a student would bring something to be weighed, but for the most part, the bank was run by teachers and used by teachers. Once a month a contractor would come and purchase the recyclables. The environmental program at The Madrasah focused very much on documentation and statistics, which were managed by teachers. The opportunities for students to be involved in the environmental program were limited to watering plants in the greenhouse, bringing recyclables to the bank sampah, picking up rubbish and sweeping and involvement in the occasional event such as ‘Rubbish Day’ (Hari Sampah). Year 12 students were not allowed to be part of the environmental club, as it was felt that participation would interfere with their studies.
I never once saw students using the schools’ shredding machines in preparation for making compost. An environmental cadet at The Madrasah informed me eight months into the school year that the shredding machine (komposter) was next to the greenhouse, but the composting team needed ‘regeneration’ because the new environmental cadets had not yet learnt how to use it.

Saturday clean-ups at The SMA were similar to those at The Madrasah except there was no recycling bank. This meant that the main activities undertaken were emptying bins, taking recyclables to a shed at the back of the school (where they piled up until they were picked up by a contractor), sweeping inside the classrooms, sweeping gardens and occasionally, trimming gardens and washing windows. Being keen to see some ‘environmental action’, I asked a teacher at The SMA whether any students would be composting during this Saturday clean-up session. He replied, ‘We are focusing on cleaning, as we have year 12 exams starting tomorrow. Composting is too much hard work’. After a while I stopped asking about the ‘environmental actions’; it became uncomfortable, as teachers felt the need to create excuses.

Both of the schools had shredding machines for compost, yet I never saw either of them in operation. The Madrasah had only a few palms in pots so had very little need for a shredder or compost and although the SMA could have used it, the students did not. In order to achieve their Adiwiyata status, however, they were required to have one, as well as having biopori holes and greenhouses. The fact that the schools were willing to invest in greenhouses, composters and the like and not use them demonstrated to me that the point of their EE programs was for the accolades and prestige, and certainly not for the environmental outcomes.57

On one visit to The SMA, I walked the grounds with two year 11 students. The students pointed out the gardens, different types of plants, biopori holes, the (unused, custom built) composting area, greenhouse and canteen (a source of great pride for the school). We started talking about the biopori holes, and the students told me that there were 200-300 biopori, but many were no longer functioning as result of the volcanic ash that had filled the holes (almost 12 months previously). The students explained that the holes could no longer be used, as no-one had cleared out the ash and it had hardened like concrete after getting wet. The girls told me (in answer to my questions) that biopori are important, as they allow water to return to the ground and then we can use it in our wells and there would be floods without biopori. Neither student could tell me to where water drains without biopori. They understood the basic purpose of the biopori, but did not know about drainage or water

57 Funding for composters and greenhouse was supplied by the Environmental Agency.
systems (that are highly visible in most of Yogyakarta). The understanding that these two students demonstrated was quite basic, disconnected, and a fair reflection of the EE program at the school.

In his consideration of what makes education and what makes an educated person, Jickling (1992:6) argues ‘[We] [presumably Global North educated adults] expect the educated person to have some understanding of the relationships between those bits of information that enable a person to make some sense of the world; the educated person should have some understanding about why a relationship exists’. The biopori example was just one of many where I felt that the students’ environmental education (and general education) had failed them by not assisting them to make connections between environmental issues or between issues and behaviours that impact on these issues. Nor did it encourage them to think critically or feel empowered to take action. Jickling (1992:6) suggests ‘[We] would be reluctant to say that a person was educated if we judged that he or she could not think for him or herself’. I do not suggest, however, that the students at my schools could not think for themselves. On various occasions students made insightful observations and offered solutions to some of the social and environmental issues at the school. The issue was not that the students could not think for themselves, it was more that they were not encouraged to and were not provided opportunity or support to act on their ideas, as demonstrated by the lack of support for the agents at The Madrasah’s Rubbish Day event.

On my final visit to The SMA, I noted that the shredding machine for composting was locked away in its purpose-built shelter collecting ever more dust, the gardens were dry and had more dead plants than live ones, the biopori holes were still largely unusable and after six weeks the laminated environmental action reminder signs were still yet to be distributed to the neighbouring schools. Ibu Widiya’s words rang in my ears: ‘When you do EE, you need to use your soul. It’s no good if you don’t have your soul in it’.

There were some clear shortcomings in the EE programs in both schools: the Adiwiyata actions were only valued for the opportunity to achieve higher Adiwiyata status and prestige for the individual teachers and the school; the environmental actions were seen to have no educational value, and the environmental value was not acknowledged; and the curriculum and textbooks lack environmental content, and where it was included and taught, it was taught without engagement or critical thinking. These shortcomings culminated in a superficial program that did not meet its potential. This then raises the question of how EE could be more effectively included in senior high school

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58 See Chapter Seven for more on textbooks and missed opportunities.
education in Indonesia. (See Chapter Seven for discussion on this). The following section details how ENGOs in Yogyakarta are working to enhance the uptake of EE in schools.

**Support for schools in Yogyakarta**

**ENGOs and EE**

The roles of ENGOs in EE are varied, and there is no clear definition of the role they should play in EE. There is, however, a clear call by the UN for NGOs to work with governments and other organisations to deliver EE. The *United Nations’ Plan of Implementation of the World Summit on Sustainable Development* highlights the need to ‘enhance partnerships between governmental and non-governmental actors, including all major groups, as well as volunteer groups, on programmes and activities for the achievement of sustainable development at all levels’ (United Nations, 2002:62).

Tilbury et al. (2003) argue that the increasing importance of the roles of NGOs in EE (ESD) was highlighted during the 1992 Earth Summit in Rio de Janeiro and reinforced at the 2002 World Summit for Sustainable Development in Johannesburg, where the work of this sector was increasingly profiled and identified as key in bringing about transformative change. They suggest that the role played by NGOs in advancing education for sustainable development cannot be underestimated, as NGOs are involved not only in initiating and/or supporting grassroots processes towards sustainable development, but also in agenda-setting, influencing policy, and global governance. With this in mind, I was led to question why NGOs were not more visible in senior high schools in Yogyakarta.

Yogyakarta is well known as a major hub for NGO activity, supported by its thousands of university students who temporarily move to the city for the duration of their degrees (and often beyond). There are many well established ENGOs and small groups taking on a variety of causes. Despite its high number of schools and universities and the prevalence of NGOs, it is not common for ENGOs to work with schools in Yogyakarta (unlike Surabaya). Where it does happen, it is usually in an ad hoc manner with the NGO having little expertise in education.

**Looking good online**

My expectation that I would have access to a number of NGOs delivering high quality EE to schools was largely based on two factors: my knowledge of the situation in Surabaya where one NGO was working closely with government to deliver EE in schools and the online profiles of various NGOs. As a result of examining Twitter feeds, Facebook posts and websites, I had the clear impression that there
were some very active environmental NGOs in Yogyakarta. After meeting representatives from eight NGOs and observing five of them undertaking education campaigns, I realised that there was a disparity between the organisations’ on-line profiles and what they were delivering on the ground.

One ENGO promoted itself as an NGO that assisted schools with EE. When I enquired a little further, I was informed that the ‘ENGO’ was one university student who was funded by a local petroleum company to run an EE program. When I spoke to the representative, he had only worked with one junior high school. Another ENGO (Green Youth) that had an impressive Facebook and Twitter account was receptive to meeting with me. I asked to meet at their office and was told they did not have one, they worked ‘on-line’. I understood that the cost of renting an office space might be too much, but was a little surprised as over the years I had been involved with a few NGOs, and most had some kind of meeting space – usually a room in a shared house, an annex attached to a family house or even a local warung (food stall). The members of this ENGO were happy for me to join them as a participant observer, but they had no school visits scheduled, so I accompanied them on a protest (kampanye) on the use of uncertified palm oil in Procter and Gamble’s (P&G) shampoo and soap. Unlike COP’s kampanye (described below), it seemed that no media organisations had been notified of the event; it was not held in a busy public space, and there was no plan for communicating the message to the company at the heart of the protest. To my surprise, this kampanye was not being organised by Green Youth, but by an arm of a larger, internationally known NGO. The kampanye was staged at Monument Jogja Kembali, which is a museum (inside a pyramid-shaped building that is referred to as a monument) that is situated off the main road, in the middle of a night time fair which is visited for its night lanterns and rides for small children. Because the kampanye took place at 3.30pm, there were very few people at the fairgrounds (mostly sellers preparing for the evening crowds). The kampanye started over an hour after its scheduled time and was little more than a fun social outing for the university students present. The students donned shower caps, towels and sometimes bath robes over the top of their clothing and applied shaving cream that looked like soap suds and shampoo to their bodies and heads. They carried mandi scoops (used for scooping water out of a bucket when bathing). Most of the protesters were dressed in long pants and long-sleeved shirts, and almost all female protesters were wearing a jilbab (headscarf). They did not look much like they were bathing. A few brave male protesters rolled up their pants to appear naked beneath their towels and one protester took off his shirt. A single protester was dressed in a full body tiger costume, and a few others had

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59 Kampanye I loosely translate as protest. Kampanye can take many forms and over the years has transformed from a traditional protest march at a busy intersection or monument (usually at Titik Nol, Bundaran UGM or Tugu in Jogjakarta) to online education campaigns, art exhibitions, street theatre and any other form of expression.
tiger masks. The tigers (representing the animals threatened with extinction from palm oil plantations in Sumatra) were then ‘chased’ by the bathing protesters while being photographed. The session finished up with some group photos in front of banners reading ‘Fearles [sic] for forest’ and ‘protect paradise’ with the large NGO’s name. I asked three volunteers from Green Youth where these photos would be sent or how they would be used. None of them knew. I saw nothing to suggest that any of the ‘protesters’ felt connected to the issue they were protesting. There were no impassioned speeches, no signs of seriousness and plenty of joking, flirting and teasing among the participants, to the point that I felt a little uncomfortable, as it seemed I was observing an adolescent dating event rather than an environmental protest.

After a few months of following Green Youth online and texting with their leaders, I gave up hope of observing them working with a senior high school. At that point they had not been to any schools and did not have any booked in. Meanwhile, the environmental club at my daughter’s school was planning on making some biopori holes, so I invited Green Youth to lead the session (as I knew they had made biopori holes before). The volunteers from Green Youth arrived approximately 30 minutes late for the 60 minute session and wanted to give a Powerpoint presentation to the students. Although I had enquired in advance if they needed anything set up, they had not informed me of this plan, so more time was taken in efforts to set up the projector and have the students gather in a classroom. I interrupted the presentation with 15 minutes left, as I was concerned that the students would not get the chance to make the biopori and I was also quite confident that the students had a clear idea of how biopori worked, as we had discussed it at the previous environmental club meeting. The Green Youth volunteers were confused about how to divide into groups and where to dig the biopori holes (giving me the impression that this group of volunteers had never done this before). While the students were digging the holes, the volunteers were taking photos of them, asking their names and other details such as the country their parents come from. At the end of the session, we took a group photo in front of Green Youth’s banner before saying goodbye to the students and having a (customary) cup of tea. Early the next morning I was horrified to see a tweet from Green Youth that featured a close up picture of one of the students and a caption that provided the student’s name and the school name. I contacted Green Youth immediately and asked that they removed the tweet and asked them to not identify any students by name on their social media without the permission of the school or the child’s parents. The tweet was promptly removed. After this event, the school introduced a code of conduct for volunteers entering the school grounds.

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60 Many of the students at the school have at least one parent who is not Indonesian. These ‘mixed’ children are often showered with attention and considered beautiful and handsome for their Eurasian appearance and paler skin.
This was the final interaction I had with Green Youth, as it became apparent they were not providing EE to schools and were not of the standard that I was hoping for. This situation caused me to question why an NGO would promote itself online in a manner that it did not have the capacity to fulfil in the offline world. My feeling was that they were never particularly serious about their NGO ‘work’. The group was made up entirely of university students who volunteered their time (unwaged). Unlike other NGOs that I worked with in Yogyakarta, (Animal Friends Jogja and COP), Green Youth had no clear cause to champion and no mature, experienced leaders or mentors to set standards or model behaviour. For these young people, the group offered various benefits, including: the opportunity to socialise freely with the opposite sex (without ‘adults’ supervising) in a way that would be considered suitable for the mostly Muslim members; the opportunity to belong to a group and undertake activities in their free time (important for many students who reside in boarding houses); and being involved in a group (and possibly having a leadership role) that would look good to future employers. With this in mind, it became clear that Green Youth’s use of social media was not to educate (although they claimed this), but was to recruit others (with whom to socialise) and to positively promote the Green Youth brand. Their use of Twitter as the main medium for communication was unsurprising for a group that consisted of university students.61

Various papers have explored the role of social media in activism (Budish, 2012; Dreiling, Lougee, Jonna, & Nakamura, 2008). Lim (2013) and Kurniawan and Rye (2014) examined the use of social media in Indonesian environmental activism. The focus of these articles is largely on how social media is used and its effectiveness compared to more traditional techniques (including exploration of themes around clicktivism and slacktivism). Neither of the articles explores issues of misrepresentation or exaggeration online, which is what I witnessed with the examples outlined above.

Dreiling et al. describe the emergence of hundreds of new decentralised, grassroots environmental organisations in the USA in the 1990s and refer to these new environmental organisations as ‘4th wave grass roots organisation[s]’ (Dreiling et al., 2008:424). They suggest that new opportunities for networking, facilitated by emerging technologies, have nurtured the expansion of grassroots organisations. Green Youth, I suggest, is not a 4th wave grass roots organisation, but perhaps a 5th wave grass roots organisation – one that exists primarily online. Unlike most 4th wave grassroots environmental organisations that come about in response to local environmental issues (Dreiling et

61 Twitter is widely used amongst young adults in Indonesia. At the time of my fieldwork, there were close to 20 million active Twitter accounts in Indonesia (and 225 million globally) (Lukman, 2014).
Green Youth was formed for social reasons, and ‘the environment’ and ‘environmental education’ became their secondary focus. I do not believe that Green Youth can be placed in the ‘slacktivism’, ‘clicktivism’ or ‘arm-chair activism’ camps. These terms largely refer to activism that is carried out on-line, does not include personal sacrifice, and is not or result-oriented (Budish, 2012). While I do not believe that Green Youth focused on results-oriented activism, the members devoted time to the organisation by holding meetings, talk-shows, camping activities and updating their social media profile. In fact, to become a member of Green Youth, individuals have to undergo an extensive selection process and promise to attend meetings and actively participate in Green Youth activities. I therefore argue that Green Youth are more an example of shallow activism than clicktivism or slacktivism.

The environmental club at my daughter’s school took the opportunity to work with another larger NGO that is well known for its environmental work. This ENGO agreed to come each week over the course of the term and deliver an EE program. From my observations and discussions with the teachers running the environmental club, it was evident that although this NGO took its environmental work seriously, the education work was left to whichever university student was available and interested. Like the Green Youth volunteers, the WAHLI volunteer educators were enthusiastic but had no experience in education other than their own. It was becoming clear to me that the NGOs were content to have volunteers with no teaching or education experience (other than their own education) to deliver their education materials. As outlined in the sections below, COP was no different in this respect.

Navigating in the education wilderness: COP

My introduction to COP as a ‘researcher’ began with an interview with one of the founders of COP. The interview was conducted at COP’s (then) basecamp in Yogyakarta. Basecamp was a modest brick building adjacent to the family home of one of COP’s staff members and was comprised of an open workspace of approximately six metres by four metres with a whiteboard on the wall, a bookcase, a few desks, some laptops, a tv and an old couch. There was a bedroom with mattresses on the floor (used to accommodate visiting activists, volunteers and friends of COP), a modest bathroom, storage area and table and chairs on a makeshift porch at the side of the building. The southern doors opened

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I was not involved in arranging this agreement and was only available to attend a limited number of sessions.

I am tempted to call them education programs, but these ‘programs’ were mostly Powerpoint presentations or information.
into the family’s *joglo* (Javanese style building used as a meeting area), which was equipped with a gamelan set, floor mats to sit on and some low tables.\(^64\) This space was usually off limits for COP.

The Centre for Orangutan Protection was created in 2007 by Mas Hendi\(^65\) and a handful of close friends. Mas Hendi was already working for an established orangutan conservation NGO, but after saving 256 orangutans from palm oil plantations in one year, he felt that something more needed to be done to stop forest destruction.

> So there needed to be someone to campaign, to campaign to stop forest clearing. 
> There needed to be someone brave enough to fight the palm oil plantations that were killing orangutans… to stop the evil and cruelty towards orangutans.
> (Mas Hendi, COP founder, interview 2 June 2014)

Mas Hendi explained to me that the NGO he was working with was unable to be radical enough to do what needed to be done because of a memorandum of understanding between the NGO and the local government. Indeed, COP’s early years were quite radical, with many confrontations with palm oil companies and government officials. Education was not on the agenda in COP’s early years, but became an increasingly important part of their work as their approach as an organisation shifted to a more multi-faceted approach that required more ‘troops’ and a ‘new generation of activists’. COP developed a four-day training camp for selected prospective volunteers, known as *COP School*. Each year, a new ‘batch’ of volunteers graduates from COP School. Each new graduating class is expected to become ‘animal protection activist troops who have the same vision and mission [as COP]’ (Susanto, 2016).

**COP School**

Prospective participants submit a written application to attend COP school and are responsible for paying their own costs to travel to Yogyakarta, as well as a registration fee of approximately Rp450,000 or AUD $45. Participants come from all over Indonesia, with most coming from different parts of Java and Sumatra and some from Kalimantan. Participants are almost exclusively university students from a variety of faculties, and they are selected based on their written responses and completion of various

\(^{64}\) In this case, the *joglo* was used by the family to store a gamelan set and hold community meetings.

\(^{65}\) *Mas* is a term used in Javanese to acknowledge a young man. I refer to Hendi as *Mas* Hendi, rather than *Bapak* or *Pak* as we became friends when we were still young enough to refer to each other as *Mas* and *Mbak*. By continuing to refer to Hendi as *Mas* (and he referring to me as *Mbak*) we are acknowledging our long friendship and closeness in age. Following Mas Hendi’s example, all COP friends refer to me as *Mbak*, whereas school colleagues refer to me as *Ibu*, noting my status as a married woman and mother.
pre-registration tasks that are designed to assess a prospective volunteer’s suitability and commitment to the cause. I was fortunate to be accepted as a participant observer into COP School Batch 4 at the beginning of my fieldwork period.

COP School Batch 4

COP School Batch 4 began with introductions amongst the 40 new recruits, past COP school graduates (who are now officially referred to Orangufriends and act as volunteers) and COP staff, and was held in the joglo area of base camp. After introductions, we (participants) were asked to observe the rules of the camp and sign a document that released COP from any obligation if we were injured.\(^66\) We were then presented with our orange COP School Batch 4 (limited edition) t-shirt and asked to change into it in preparation for group photos. After the photos, we sat down to a presentation from the director of the Sumatran Orangutan Conservation Programme. He spoke for approximately an hour (in Indonesian) and outlined the features of Sumatran orangutan (in contrast to Bornean orangutan) and the threats they face. After a question-and-answer period, we set off on a three hour ‘long march’ from COP base camp to the accommodation venue with each recruit carrying their bags and bedding. The idea of the march, according to Mas Hendi, was to build a sense of comradery amongst the recruits and volunteers who lead the recruits in six groups.

Over the course of the four days, attendees sat and listened to information sessions on topics including: COP’s organisational structure, work and expectations of staff and volunteers; orangutan and forest basics; the current situation in Sumatra and Kalimantan in regard to palm oil and NGOs working to combat its effects; the law and illegal trade of animals; and COP’s approaches and policies for campaigning, communications and working with authorities to bring about prosecutions.

Each session was presented by a COP staff member or an invited guest who worked in the field (such as aforementioned orangutan conservation director from Sumatra, a wildlife vet based in Sumatra, and the CEOs from Bornean and Sumatran orangutan conservation organisations). Sessions lasted about an hour each, and during these times recruits were required to be present. Most took notes. Energy levels waned; at times I observed up to four or five people napping. On the final day of COP School, participants were transported by cattle trucks to a position just south of Mt Merapi and undertook a trek to a training camp approximately an hour and a half north of the drop-off point. The trek went across rivers and along paths that wound through the local villages and natural

\(^{66}\) I have never seen any other NGOs or businesses in Indonesia include this type of waiver.
surroundings. Some parts of the trek were through muddy forest areas and across rocks, and one section required climbing with a safety rope for support. The idea of the trek was to build team morale and expose urban recruits to the natural environment.

There was one education-themed session at COP School that was facilitated by a COP volunteer and an employee of Animals Indonesia (partner organisation of COP). The facilitator, Mas Peno, modelled the approach he wanted COP volunteers to take with their education programs and, after a brief explanation of the task, asked the recruits to take their pen and worksheet outside and to look in nature for their answers. The recruits (and I) enjoyed the break from sitting on the floor and listening to oral presentations. (See below for discussion of COP’s education approaches in schools).

One of the last activities of the four-day COP school was a rehearsal of a kampanye using COP’s Stop Palm Oil banner (Stop Sawit). This was the only practical, hands-on activity for the volunteers who endured lectures from 8am to 10pm most days with small team-building activities used as ‘refreshers’ in-between. The kampanye activity was set up by COP to test the new recruits and to demonstrate the potential pitfalls of kampanye. In a session on the previous day, Deny, a COP leader, had clearly outlined the rules around kampanye and the reasons for them, giving examples of when and how things had gone wrong for COP and other organisations in the past. He stressed the importance of abiding by the rules for the success of the kampanye, for the safety of the participants and in order to maintain COP’s level of professionalism. The rules included the following: protesters must clearly understand the protocols and details regarding the meeting point, locations, leadership and individual roles before arriving at the venue; everyone must be on time; protesters (male and female) must be in COP uniform and wearing long pants and shoes; protesters must not eat, drink or smoke in the vicinity of the protest; only the designated spokesperson is allowed to answer questions from media or interested observers; protesters must not smile or joke around (as what we are protesting is a serious issue and we do not want photos in the media of us joking around at our own protests) and at no point do protesters run; if they feel threatened, they are to link arms and lie down. COP always follows protocol and informs police and other relevant parties of their protest plans. Deny assured the group that once the protest was finished and everyone had re-grouped at the agreed location (away from the protest), there would be plenty of time for eating, drinking and joking together.

The new recruits were eager to finish off the camp with a hands-on activity and enthusiastically set about nominating a spokesperson and leader for the practice kampanye. It was clear that they were keen to demonstrate their capacity and to be accepted by the COP team. The Stop Palm Oil banner
was so large that it required almost all of the recruits to assist in holding it off the ground. COP staff and volunteers (graduates from previous COP schools) took on different roles, including being ‘the media’ and ‘the public’. They wandered amongst the group, asking questions, asking for photos, encouraging the recruits to smile and pose for cute pictures and talk to the video camera about what they were doing. Just as the recruits seemed to have the enormous banner unfolded and facing the right direction a small group of COP volunteers who had been quietly absent from the activity rushed at the recruits, yelling and holding up their arms as if in anger. The recruits panicked and many dropped the banner and ran screaming, leaving their comrades behind. After the failed kampanye, Mas Hendi gathered the group and reviewed the rules of kampanye, identifying where the recruits had failed. These failures included not wearing shoes, taking food that was offered by ‘the public’, posing for cute photos, speaking to ‘the media’ (and not directing enquiries to the nominated spokesperson), joking around and running away when threatened (leaving others in danger). Mas Hendi and the other COP staff took great delight in imitating the recruits running screaming and posing for selfies. The tone was jovial, but the lesson was clear.

This highly entertaining scene demonstrated the value of COP school. COP is a very hard-working organisation; the staff members take their work very seriously. Kampanye can be dangerous. As explained by Mas Hendi to the group, the companies and organisations that COP are going up against in their protests are clever and capable of exposing any of COP’s weaknesses. Each and every person involved in COP protests has to be well trained and disciplined in order to avoid trouble.
Figure 5.1 COP school students being loaded into the back of a cattle truck
Source: Kelsie Prabawa-Sear

Figure 5.2 The Stop Sawit kampanye sign
Source: Kelsie Prabawa-Sear
In the final session of COP School, recruits were informed that their graduation would take place at COP’s annual Jamboree at the end of the year. This gave the recruits six months to prove their commitment to the cause and capacity to support COP’s work. Recruits were told that COP would keep them all connected through a closed Facebook page and encouraged everyone to be active in any way possible: running education sessions, fundraisers, selling merchandise and spreading the word about COP’s work and orangutan conservation among our own family and friends.
Over the course of the four days, it was evident that the COP ‘leaders’ placed importance on building relationships among the new recruits, the volunteers and staff. COP staff members were friendly and familiar with the volunteers (graduates from the previous year – Batch 3) and extended this to the new recruits, most of whom (approximately 75%) were female university students or recent university graduates. In an interview many months after COP school, I asked Deny, one of the leaders, about the role of volunteers in the organisation.

One of the fundamentals that we really hold on to is that a volunteer is not someone who only works to help animals, but that a volunteer is a family member, a friend. This relationship has developed amongst us and, so far, things are going really well.

(Mas Deny, COP leader, interview 19 May 2015)

There was a lot of laughing and joking between sessions and over meals but the rules of conduct were clearly stated in the first session and were adhered to throughout. All participants were expected to be respectful and attentive. Their focus was to be on learning. Unlike the Green Youth campaign, this event was clearly about achieving the goals set by COP and not about finding a prospective boyfriend or girlfriend. While COP had set a clear agenda for COP school, there were, nevertheless, jokes and teasing about which COP leaders were still single, as it was an opportunity for young men and women to mix in a way they are not normally able to.

The COP staff members are a varied group who work in very different roles professionally and geographically. Some are university educated and others are not, some are Christian, others Muslim, and at least one is considered very ‘devout’ by his peers. Unlike many other NGOs in Indonesia, religion, education, age and gender are not prerequisites for employment at COP. For most of the recruits, this was likely to be their first experience in a social group that was not divided along religious or gender lines, and it seemed to appeal to them. Within COP, cultural and social capital comes from demonstrated commitment to the cause: years of service (as a volunteer or paid staff), time spent in the rainforest and courage in facing difficult or dangerous situations. Both male and female staff members and volunteers are afforded great respect for their work, and the COP leaders delighted in telling stories of their colleagues’ bravery, strength and resilience in both the rainforest and the

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67 The leaders are COP men and women who have been with the organisation for at least 5 or 6 years and have roles with greater responsibility within the organisation. These leaders range in age from 33 - 43 years.
boardroom. This mutual respect helped to build a very strong, positive culture in the organisation. This positive culture combined with the important work that they were doing was very appealing and was something that the recruits (myself included) were very keen to become a part of.

**COP’s approach to school visits**

The team

During the year that I was involved with COP as part of my fieldwork, there was no dedicated education specialist. Instead, the education program was run by volunteers and overseen by the Yogyakarta-based staff and in particular, Mas Wiryo. None of the COP staff or volunteers had any experience or training in education (other than their own experiences as students); very few volunteers felt confident enough to speak to groups of students. In fact Mas Wiryo was the most reluctant to speak in front of an audience (of any age). COP had a rotation policy for its paid staff that required its leaders to rotate between positions in Yogyakarta and Kalimantan. This policy was introduced as an attempt to make sure staff had the opportunity to work in the relative comfort of the Yogyakarta base after completing their stint in the much more challenging stations in Kalimantan. As a result, staff were required to have skills that transferred across locations and different job types. Unfortunately, Mas Wiryo did not have the public speaking skills required for the position he was in.

Over the course of my field research, I observed COP conduct school visits at an international school, a state junior high school, a state senior high school, my daughter’s school (K-12 English curriculum school) and two home school events. Although there was no education ‘specialist’ amongst the group, one volunteer, Mbak Nina, was the first choice as the spokesperson and presenter. In her free time Mbak Nina was a long-serving COP volunteer and a member of an ‘extreme campaign punk band’ which campaigned for animal rights. During working hours Mbak Nina was an accountant. Mbak Nina was a confident speaker who could control large crowds rather effortlessly (I observed her presenting to 350 junior high school students) and was confident with her knowledge of orangutan and the work that COP did. When Mbak Nina was unavailable to present, there was not a confident replacement. The following (edited) field notes demonstrate the difficulties in finding a confident presenter.

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68 At the time of COP School Batch 4, male employees far outnumbered female employees, and female volunteers far outnumbered male volunteers. In late 2015, COP employed three new female staff members in the roles of lawyer, veterinarian and communications officer which helped to bring a gender balance to the paid staff.
After COP School Batch 4, the volunteers had very quickly printed off letters and delivered them to schools around Jogja [Yogyakarta]. Then we had the new school year start and suddenly COP found itself with increased interest from schools.

Meeting:
Mas Wiryo put out a call on Facebook for those in Jogja to come for a meeting this afternoon at 4pm at Base camp (approx. 6 hours notice). Mas Deny was in Sumatra and Mas Wiryo had just received news he was needed for an operation (illegal trade) in East Java so would be away for at least a few days. This meant that the education visits would be left to the volunteers (who included Mbak Titi, Mas Wiryo’s wife, who also has their almost one-year old baby). Because university hasn’t started back yet, lots of the COP volunteers are still out of town, at home for the break, doing KKN [compulsory work experience as part of an undergraduate degree] and at least one is looking for work after graduating.

Mas Wiryo asked who could present and organise picking up merchandise, printing information sheets, etc., as he would be going out of town and Mas Deny was still in Sumatra.

Dessy, Titi and Dina were reluctant to volunteer to be presenters at the school visits. They were happy to attend, help set up, etc, but not present. Mas Wiryo tried to pressure Dessy and Dina, even though he himself doesn’t do presentations. After much to-ing and fro-ing, Dessy and Dina agree that Mas Wiryo can send them the Powerpoint presentation so that they can familiarise themselves with the material, but neither will agree to being a presenter.

(Anggit, Susi and Nato arrive at this point)

I asked why no one wants to do SMA presentations (everyone keeps saying they’ll do SD [primary school] presentations but not SMA [senior high school]). ‘Mereka lebih kritis’ [They are more critical]. Mas Wiryo explained to me that he tried to present once before but he was sweating too much and couldn’t speak and needed to go and have a cigarette. He said, ‘I can’t do it’. Then he continued on, pressuring Dessy and Dina who are a lot younger than Mas Wiryo and new to COP (Batch 4), and neither strike me as confident public speakers, although may be, given the
chance. He says, ‘Go in, introduce yourself and your friends from COP, start the presentation, then show the movie...’ It is explained very casually, as if Mas Wiryo thinks it’s no big deal. Dessy and Dina are silent. Dessy starts looking at her phone. They both look uncomfortable.

Conversation moves on and Mas Wiryo starts doing a stocktake. I start to pack up as it’s about 5.30pm and I need to get home. At this point I’m unsure what will happen on Friday and resolve to keep an eye on Facebook to find out. Then Nina arrives, and everyone is relieved as she says she can do it.69

(Field notes from COP meeting, 25 August 2015)

The COP team differed for each school visit I observed, depending on who was available on the day. The education sessions for the high schools (junior and senior high) were almost identical and the international school visit was the same, except that Mbak Nina spoke English rather than Indonesian with the students.

On different occasions COP staff and volunteers warned me that local students and teachers had very little knowledge related to orangutan. I was told that many students thought that orangutan were monkeys and some thought that orangutan were found in Africa. I was also informed that different schools had students with different ‘capabilities’; the favourite schools and international school students could be expected to have higher levels of knowledge. Despite this apparent difference in ‘capabilities’, COP used the exact same approach and materials for each visit.

School visits started with the COP volunteers (usually three or four people plus Mas Wiryo) meeting at the front of the school before reporting to the front desk and meeting the relevant teacher. The group then moved to the relevant area (classroom or auditorium) and one volunteer set up the laptop and connected it to the projector. At one school visit (the junior high school), the volunteers set up a small stall with stickers and one or two t-shirts for sale, pamphlets and a donation bowl.

The education sessions at the international school and senior high school were conducted with one class (approximately 26 students). There were multiple classes at the junior high school (approximately 350 students in an auditorium). The students were clearly excited, cheering, waving

69 Although Mbak Nina was available for the first visit, she was not available for the second one, which was done by Mbak Dessy (who turned out to be a good presenter).
and screaming as Mbak Nina introduced herself, Dessy, Wiryo and me. The noise was unbelievable, and the audio system was louder than it needed to be, causing distortion and making it very difficult to hear what Mbak Nina was saying. Mbak Nina’s ability to engage with and hold the attention of the students in the larger group was clearly limited by the defective audio system and the size of the group. At any one time, most of the students in the back row were messing around, playing on hand phones or talking amongst themselves. Most students watched intently as the first video played. As described in my field notes below, the students’ reaction to footage of orangutan was somewhat puzzling, but their appreciation for COP’s work was clear.70

Video: Starts with idyllic kampung [village] life. Kids cheer and laugh when seeing orangutan. They go very quiet when the footage changes to deforestation. Most of them are watching attentively. They laugh at a caged, chained and visibly sick looking orangutan – why? Gasp at footage of an orangutan being kicked. At the end of the film there is text outlining the work that COP do and what they have achieved. The kids read it and applaud loudly.

(Field notes from school visit, 9 August 2014)

Mbak Nina used a video and Powerpoint presentation with pictures to explain the work that COP does and some basic facts about orangutan. She told the students, ‘We [i.e. Indonesia] are special, like Brazil, because of our forests’. The students applauded this point. I suspect that this was more about them wanting to be like Brazil (a champion football nation) than it was about the forests. She explained nesting and feeding patterns and the importance of the mother and baby relationship. She told them that a mother must be murdered in order to get a baby because mothers are strong and will never let go of their babies. Most of the students seemed interested and were listening, but when Mbak Nina started asking questions, no-one offered answers. None of them offered questions when asked, so Nina showed another video. This video showed sad images of orangutan in captivity and then images of COP’s work at the zoo in Solo (Central Java) which transformed a depressing-looking enclosure with no shade to one with hammocks, shade and climbing equipment for the orangutan. Mbak Nina tried again, asking for questions and gave out COP postcards and stickers as reward for questions. The first three rows were mostly listening, but the ten or so rows behind them were chatting and not paying attention. The session ended with a third video which was more upbeat and showed orangutan in the

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70 For many foreigners, the treatment of animals in Indonesia is upsetting and difficult to comprehend. There is a dearth of literature on the subject of the relationship between people and animals in Indonesia. Bogart (2014) considers the changing relationship that Balinese people have with dogs and the impact of tourism and foreign-run NGOs.
wild and outlined the work that COP does. The students applauded and rushed over to the table to give donations and buy stickers. The volunteers and I packed up and left. There were no teachers present throughout the presentation, and no one was there to see us off.

As per COP tradition, we went for a meal immediately after the presentation. Mas Wiryo invited comment and reflection on how the session went. One volunteer suggested that perhaps the ending of the presentation needed to be clearer, as students seemed confused that it was finished. I was surprised that this was the first suggestion, as I was focused on the appalling audio quality and lack of engagement with approximately 75 percent of the students. I suggested that since it was such a big group, it was hard for the students at the back to feel involved and maybe we could consider dividing into groups for some parts of the session if we had such a big group again. I received polite agreement, but not much more than that. Mbak Nina suggested that the other volunteers should be prepared to answer questions too (not just her). I think that this was as a result of the question that a student asking about the differences between Sumatran and Bornean orangutan that she struggled to answer. I tried one more time to start conversation about engaging the students and suggested that the students seemed supportive and interested. I noted that had we thought of it in advance, maybe we could have invited them to join the (then current) online campaign for Orangutan Day (where supporters were asked to take a photograph of themselves holding a piece of paper that said ‘Orangutan day’ and share it on COP’s social media. I thought (and still do) that this was an age-appropriate activity and a nice, non-controversial way to invite the kids to be involved. Mas Wiryo, however, thought otherwise. He told me that no, we could be thought to be exploiting children, as Prabowo did in the election campaign. I tried my best to conceal my horror at my idea being likened to anything that Prabowo would do.

Approach to education

This difference in perception was highlighted again when Mas Wiryo and I were planning activities for the environmental club at my daughter’s school. I was determined that we would not only ‘educate’ the students about the plight of orangutan (both in captivity and in the wild), but would undertake projects to help the orangutan. One of the projects that I suggested was for the environment club members (aged 6-16 years) to construct a hammock (made from donated fire hoses) for a captive

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71 Prabowo Subianto was a leading candidate in the 2014 Presidential election who has long been accused of gross human rights violations during his time in the Indonesian military (van Klinken, 2014). During the Presidential election Prabowo was accused of exploiting children in his campaign efforts. The General Election Commission (KPU) stated that involving children under the age of 17 years [in campaigns] is considered ‘child exploitation’ (Rakhmatulloh, 2014).
orangutan with the help of COP volunteers. Mas Wiryo seemed unimpressed with the suggestion. I explained that this group of kids liked to do practical things and not just be given information. He told me that hammocks would be too hard for children to make. I gently argued that we had a range of ages, including some strong teenage boys and the students could work together to do it, but he was unconvinced. I did not want to push the point any further at that stage, as his comment about not wanting to exploit children was still fresh in my memory. I was hopeful that by working with COP and the environmental club, I could demonstrate how much value there was in engaging the students in activities that resulted in not only an increased understanding of issues, but also positive outcomes for orangutan. Mas Wiryo appeared to have a change of heart after attending an environmental club session where the students made enrichment resources for orangutan in captivity; he sent me a text message suggesting that we should try to make hammocks with this group of students. The hammock-making exercise was successful in various ways: the students found it challenging and fun; they were content with the knowledge that the hammock that they made would make a better life for an orangutan in captivity; and the COP volunteers enjoyed working closely with the students and having a chance to try something new with enthusiastic learners.

However, the activity was not as successful as I had hoped in that it was not enough to convince Mas Wiryo to try solution-based activities with other school groups. Nevertheless, it was the start of conversations around how COP could deliver EE that was more engaging and interesting for the students. In the coming months, Mas Warno from Animals Indonesia and I were asked by COP to run four different training sessions for volunteers on how to plan and run EE sessions. Preparing and facilitating the training sessions was easy, much easier than changing COP’s approach to education.

At the end of my fieldwork, I felt that COP was very successful in all areas of its work, except for its education efforts. The COP leaders felt the same and were keen to improve their efforts, asking me to provide more training to the volunteers. It became evident to me that it would take considerable training and exposure to different ways of engaging students before COP volunteers would have the confidence to take a different approach to education. All of the volunteers had been through the Indonesian education system and were most familiar and comfortable with the traditional approach to education with the teacher (or COP volunteer) as provider of fact and the student as a passive absorber. I was asking them to imagine a type of learning that they had never experienced and then to facilitate it. Although the volunteers were enthusiastic in discussions and brainstorming sessions and seemed excited by the possibilities, when the opportunity arose to go to a school, they resorted
to information sessions (*kasih materi*) and assessed their success on the number of students who had attended the presentation rather than the level of engagement of students.

The Centre for Orangutan Protection’s COP School offered examples of their leaders’ strengths in various areas including: campaign planning and execution; animal transfers and release; partnering with other NGOs, police and forestry officials to prosecute illegal animal traders and land clearers; and inspiring new volunteers to become animal rights and conservation activists. Unfortunately, the education team were lacking the strong leader that they required to have a serious impact on the EE space in Yogyakarta.

**Government support for EE in schools**

![Levels of Government for the environment](image)

Environmental education is difficult to place within a formal education system. It often falls through the gaps, as it is not a discrete subject. Where it is applied with an integrated approach, it often ends up being everywhere and nowhere, as seen in the Yogyakarta examples (Mokhele, 2011; Shumacher, Fuhrman, & Duncan, 2012). In Yogyakarta, the Adiwiyata Program is administered by the regional (DIY) and district/city (*kabupaten/ kota*) level Environmental Agency. This agency has no official role in schools or in the education system; government officials require permission from the Office of Education, Youth and Sport before holding Adiwiyata training sessions for teachers at state schools. Training run by the Environmental Agency is not automatically recognised by the Office of Education, Youth and Sport (and therefore does not necessarily count for career advancement opportunities for teachers). According to the Environmental Agency employees with whom I spoke, this is a significant
One government official suggested to me that in other provinces, the Education Office was more supportive of the Adiwiyata Program than the Yogyakartan office was, and this support encouraged participation by state schools. She told me that a lack of support from the Yogyakartan Office was the reason why there was a larger proportion of Islamic schools participating in the program than SMA – the Islamic schools come under the Ministry of Religious Affairs, rather than the Office of Education, Youth and Sport. Any NGO that wants to access schools in any formal and wide-spread way would require the support of the Office of Education, Youth and Sport and ideally, the Environmental Agency. In her study of EE in-service education for teachers in the USA, Wade (1996) also found that EE in-service education was not a high priority among most state education agencies. She found that state and federal natural resource agencies, colleges and universities, non-profit organisations, and school districts were more likely to provide EE professional development opportunities for teachers. The positioning of EE outside of the Department of Education, Youth and Sport (and therefore the formal education sector) is an issue that is well documented around the world and there are many arguments for and against this positioning.\footnote{See Martin (1996); Rose (2011); Teamey (2007) for more on this.}

Two government officials whom I interviewed claimed that the Environment Agency at the DIY level was restricting the number of schools that could move up the Adiwiyata rankings. This was why DIY had so few schools ranked at the higher levels.

There’s still only a few [highly ranked schools] in Jogja, not many compared to how many schools we have. 300 schools and about 15 [highly ranked]. Only 15, so that’s not balanced. If we compare to Surabaya, East Java, they have lots [of schools] that are Adiwiyata Mandiri. But Yogyakarta [DIY] has been restricted, so each district can only have one primary school, one middle school and one senior high school.

(Ibu Ani, Environmental Agency officer, interview 8 April 2015)

The reason for this restriction, which goes against the ideals of the Adiwiyata program, was said to be ‘budget restrictions’. I was assured by various people that this simply meant that the person in charge was using the money for something else.\footnote{Pak Wardiwan was moved to another government department towards the end of my field research.} Despite a reported lack of support for Adiwiyata at the DIY level for schools within the Bantul district from both the Office of Education, Youth and Sport and the Environmental Agency, almost all of Bantul’s schools (approximately 550 according to the representatives of the Environmental Agency in Bantul) are involved in the Adiwiyata Program, with
many (mostly primary and middle schools) at the National level (waiting to be allowed to move to the Mandiri level). During my fieldwork I interviewed teachers from three Bantul schools and all of them noted that the District Head (Bupati) was highly supportive of the Adiwiyata Program and expected that all schools participate in it. For two of these three schools I spoke to in Bantul, the school became involved in the Adiwiyata Program after receiving a directive from the District Head.

I had the opportunity to speak with Pak Wardiwan who was responsible for Adiwiyata at the DIY level in the very early days of my research. Amongst other things, I asked him about the prospect of having NGOs work with schools to deliver EE (as in the Surabaya case).

We don’t really support NGOs because NGOs don’t have secure funding and they will ask schools [for money] and actually it’s we who doesn’t have too much [money]. And then schools don’t have ongoing funding, so they will cut ties with the NGOs and then the process of learning and teaching about the environment will also be cut... We also cannot be sure of the capabilities of NGOs.

(Pak Wardiwan, Environmental Agency DIY, interview 29 October 2014)

Pak Wardiwan went on to explain that NGO workers lack management skills and often lack the background (or education) needed to teach EE and described it as a ‘difficult’ situation. Pak Wardiwan knew that I was also conducting research in Surabaya and suggested more than once that schools and NGOs there access ‘a lot of money’ from the government and private funds, unlike Yogyakartan schools which were ‘pure’ in their approach. He asked me to note where their funds were coming from and not to only focus on the results, but to examine the processes, because if the funds were to dry up, the results would too. I did take note of funding arrangements when researching the Surabaya case and found that schools were not required to pay anything to work with the NGO.

When reflecting on Pak Wardiwan’s words after having completed my research, having observed the situation in the two schools and having spoken with various teachers and government employees, it was evident that many of Pak Wardiwan’s comments were most likely offered in justification for Yogyakarta’s poor participation levels and achievement in the Adiwiyata Program (due to the

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74 This research project focused on one Bantul school and one Jogjakarta school. The main reasons for this were to gain an understanding of the situation in Jogjakarta city (that boasts the most schools), focusing on the two schools recommended by the DIY Environmental Agency, and for accessibility (Bantul is approximately a one and a half hour drive by motorbike from my base in Sleman, the other side of Jogjakarta City). The Bantul school that I selected is the closest senior high school to Jogjakarta City.
restrictions that he had put in place) and had little to do with what would be the best for the schools participating in the Adiwiyata Program or the environment.

**Conclusion**

This chapter has examined the Adiwiyata Program at two Yogyakartan schools and, in doing so, has highlighted the shortcomings of the schools’ programs and how the program is used to gain ‘non-academic’ prestige (symbolic capital) in a competitive education market. Although this is not a problem in itself, it highlights two important issues: EE is seen to have little to no educational value, and the ‘favourite’ schools that have reputations for strong academic programs and higher levels of symbolic capital have no incentive to take up the Adiwiyata Program, contributing to its marginalisation and effectively delegating EE to the ‘non-academic’ schools. Environmental education and, therefore, the natural environment are assigned a low status across the education system. These issues are only amplified by the reported lack of support by the Office of Education, Youth and Sport and the Environmental Agency for the program at the DIY level.

The two schools that participated in this research provided ample evidence that the teachers were not suitably trained nor motivated to implement an action-oriented approach to EE and the curriculum and textbooks provided very little opportunity for EE in the classroom. I argue that a reliance on reporting numbers and examinable outcomes all play a significant role in maintaining long-standing approaches to education. Many of the problems with EE highlighted in this chapter are problems of the general education system.

This chapter has also explored the role that ENGOs play in EE in Yogyakarta and highlighted the difficulties that some ENGOs face in trying to make an impact in the formal education sector. With teachers struggling with changing curricula and a lack of enthusiasm for EE, there may well be a place for ENGOs in the formal education system in Yogyakarta. To make the most of potential partnerships, ENGOs would need to make EE more of a priority within their organisations, improve their pedagogical skills and approaches to EE and develop relationships with the relevant government departments. The following chapter describes the situation in Surabaya, where Green Action works with government agencies to deliver EE in almost every school in the Greater Surabaya region.
Chapter 6: EE in Surabaya: Paksarela and Green Action

Introduction

Surabaya is a city that is pushing ahead with a rather aggressive approach to EE. This approach is quite proudly referred to as paksarela (forced volunteering) by various Green Action and government officials with whom I spoke. This chapter describes the approach to EE in Surabaya and takes into account the roles of the Surabayan Mayor, government agencies, Green Action and schools in enforcing a city-wide approach to EE. Data are taken from: interviews with heads of government agencies (Education, Sanitation and Parks and the Environmental Agency) and Green Action staff; focus group discussions with school principals, teachers and students; and participant observation at various environmental competitions, education workshops and environmental activities over a 12-month period.

Rickinson (2010:16) and Stevenson and Stirling (2010) argue that in research on EE there has been a tendency to overlook the process aspects and there is therefore a marked predominance of evidence on learning outcomes, but very little about learning processes. Despite this claim by some of the most prominent writers on EE in the Global North, publications on EE in Indonesia, while limited, do not focus on learning outcomes so much as environmental awareness, attitude and knowledge (Kusmawan, 2007; Maulidya et al., 2014; Sukarjita, Ardi, Rachman, Supu, & Dirawan, 2015). In his article on state-environmental NGO relations in the Philippines and Indonesia, Bryant (2001) also argues the value of focusing on the role of process as opposed to the outcome of state-NGO relations, in the belief that there is much to learn from understanding the processual bases of those relations.

This chapter examines the processes used by the Surabayan Government and Green Action as part of Surabaya’s large-scale EE program, and considers these processes in the Javanese context with a particular focus on leadership and respect. In doing so, this chapter brings to question the international applicability of the principles and characteristics of EE and ESD. It also highlights what Sauvé et al. (2007) refer to as the ‘institutionalization of EE’, which serves as a way of promoting EE (as conceptualised since the Belgrade Charter, 1976 to the United Nations Decade of Education for Sustainable Development, 2005-2014), but which has problematic approaches and outcomes. Sauvé et al. (2007:34) identify the following problems with the institutionalisation of EE: the top-down strategies used; the promotion of a ‘culturally-blind isomorphism’ (Chan-Tiberghien, 2004); the reiteration of socially constructed knowledge that fosters and reproduces domination, and uncritical
support or imposition of certain ways of thinking and doing. All of these problems are evident in the Surabaya case and are presented in this chapter.

**The Surabayan government and EE**

Surabaya has been undertaking a greening program since 2006. The impetus for the program grew out of attempts to mitigate flooding by providing more green space to absorb rainwater. The momentum of this program increased significantly under the leadership of Surabaya’s long-serving female Mayor, Bu Risma (2010-present).²⁵ Bu Risma is well known and respected by the Surabayan people for her hands-on, aggressive approach to improving Surabaya.²⁶ At the mention of her name, people proudly recount stories of her anger (screaming at people who trampled plants at a park), her generosity (carrying bags of rice in her car for hungry people), her hands-on approach (going to schools unannounced and telling Principals to implement EE programs), her accessibility (being available by walk-talky to heads of government at all hours), her clean approach to governing the city (she is the first non-corrupt Mayor, they say) and her insistence that heads of government are not only to be seen in their offices, but also work in the field. The concept of forced participation or forced volunteering comes from the top (Bu Risma), and flows down the government chain (heads of departmental offices and agencies being made to participate in environmental activities such as Car Free Day and represent their departments at environmental events), to principals who must have environmental programs at their schools. Some teachers are nominated (by principals) to lead the environmental programs and the student environmental cadets carry out the work.²⁷ In the Surabayan case, forced participation and leadership emerge as two themes that are integral to the city’s approach at greening itself. These themes are explored in more detail in the following chapter.

The question of why Surabaya was pursuing a green agenda (beyond flood mitigation), when very few other cities in Indonesia were, was something I was desperate to understand in my early days conducting research there.²⁸ I asked many people this question in casual chats and in formal interviews. The most common answer, other than ‘because of Bu Risma’, was ‘because we have nothing else’. Various people highlighted to me that Surabaya had nothing else going for it, so it needed to be green. I was told that Jakarta has business, Medan has Sumatra’s forests and natural

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²⁵ Interview with Head and Deputy Head of the Office of Sanitation and Parks, 7 January 2015.
²⁶ A Google search of Bu Risma will show Bu Risma.. marah (angry) and Bu Risma Walikota (Mayor).. terbaik (the best) 13 April, 2016.
²⁷ Most other teachers and students are not expected to participate, unless there is a competition requiring big numbers to win.
²⁸ See Kusno (2011) for a description of Jakarta’s approach to being a clean and green city.
resources, cities in Kalimantan have mining, forests and plantations, Bali has its beaches and culture, but Surabaya only has a shipping port and mosquitoes. Various government officials told me that Surabaya has no natural resources, it is not a cultural city or a student city (like Yogyakarta), so it has to be a green city in order to draw people in and to stop its own people from leaving (particularly for short-term, domestic tourism). As they see it, Surabaya has no choice but to be a green city.

At first glance, Surabaya appears unique in its approach to greening the city. The Global North’s green movement, or first world environmentalism, is traditionally reported as having started at the grassroots level; from there the aim was to apply pressure to governments to act. (Corbridge, 2000; Gadgil & Guha, 1994; Nash, 2014 [1967]; Wilkinson, 1998). Gadgil and Guha (1994) argue that first world environmentalism developed out of threats to health and leisure once basic material needs had been fulfilled. Although it may be argued that the ‘material needs’ of many upper and middle class Surabayans ‘have been fulfilled’, Indonesia is an emerging middle income country so, Surabaya is not immune to the deficiencies of infrastructure, education and health with which the rest of the country and many other nations in the Global South struggle. Gadgil and Guha (1994) contrast the development of environmental movements in India to those of the ‘ecology of affluence’ in Western Europe and North America. They argue that India’s environmental movement includes poor individuals and communities that have become involved in the green movement as a result of problems of land and resource depletion, pollution, and the decimation of biological diversity.

Surabaya, it seems, is somewhere between these two commonly used dichotomies. There is a very wealthy component of Surabayan society, a huge and growing middle class, as well as many urban poor. Surabaya is a unique example in that the government set the green agenda at a time where there was little interest from the middle-to upper-class parts of society and went about working with NGOs and schools to bring about change in the community. The desire to make Surabaya green was not born as a result of affluence, nor because of third world environmental destruction, but because the Mayor and the government see value in having a clean, green city.

Government working together

In interviews with the Head and Deputy Head of the Office of Sanitation and Parks (Dinas Kebersihan dan Pertamanan), the Office of Education (Dinas Pendidikan), and the Environmental Agency it was made clear to me that Bu Risma was the reason that these government agencies were working
together on EE and improved environmental infrastructure. Surabaya boasts 23 compost stations for composting community waste and 60 parks and green spaces, making up over 23 percent of the city’s land use. Most other cities in Indonesia (such as Yogyakarta) have yet to achieve the two percent green space stipulated by law and have no composting houses, no government-run waste pick-up service and very few, if any, free parks. The Surabayan government sees many advantages in having green space for its people, including physical health, mental health, recreational and environmental advantages. It offers free wi-fi at its parks and varied themes (skateboarding, libraries, meditation and outbound activities) in an effort to encourage its people to use the parks in a variety of ways. Surabaya also holds weekly car-free community events, has a data-tracked waste system (with trucks tracked, weigh bridges and real time reporting), river restoration projects, extensive street scaping, limits on signage (reducing visual pollution), bans on burning rubbish and numerous community environmental education programs.

These programs require multiple departmental offices and agencies to co-ordinate and work together, which is not a common practice in other cities. Each government official whom I interviewed noted the importance of working with the other departments and agencies. I was told that the Environmental Agency provided the administrative co-ordination for environmental projects while the Office of Public Works (Dinas Pekerjaan Umum), Office of Agriculture (Dinas Pertanian) and Office of Housing, Planning and Urban Development (Dinas Cipta Karya) provided the technical skills. Schools looking to obtain resources for their environmental projects could get shredding machines from the Environmental Agency, rubbish trailers from the Office of Sanitation and Parks and plants from the Office of Agriculture. According to the Environmental Agency, they facilitated this for schools. Whilst all the government officials noted the importance of their team effort, it was also evident that there was something of a hierarchy among the offices and agencies. The Education Office was clearly at the top, and the Environmental Agency was at the bottom. The other agencies sat somewhere in the middle. The head of the Environmental Agency openly acknowledged that his agency relied heavily on the Education Office’s support in persuading some schools to participate in Adiwiyata activities. He told me,

To be honest, the schools are most afraid of the Education Office because they are below it. So...we always work with them. So, if there is someone from the Education Office...
[involved] and if someone [from the schools] doesn’t show up, we report them to the Office, and the Office calls them and asks why they didn’t come. If we [Environmental Agency] are by ourselves, it’s hard, so we always couple with them.\footnote{Interview with the Environmental Agency, 26 February 2015.}

The Head and Deputy Head of the Office of Sanitation and Parks both raised the point that the government is limited in its ability to address Surabaya’s environmental issues; they acknowledged the role of education, media, businesses, citizens and NGOs. The previous chapter highlighted the Yogyakarta government’s reluctance to work with NGOs to support EE in schools. Surabaya, however, relies on the work of NGOs, Green Action in particular, to introduce and support EE in schools. Teamey (2007) suggests that non-state providers’ more flexible organisational structures and dedicated agendas allow them to be perceived as more innovative, accountable, and effective in terms of cost and delivery, while having greater knowledge of community needs than state providers. This observation holds true for the situation in Surabaya. From the interviews with the heads of departmental offices, it was clear that these leaders were happy to hand the responsibility for Surabaya’s EE program to Green Action, partly due to the perceptions highlighted by Teamey. In addition to this, there was also a perception that Green Action knew more of what needed to be done and how to do it.

Actually, we feel that there is no way that we could develop the schools [EE program] on our own. We don’t have much power. Our technical capacity is also limited. We don’t have the capacity to up-date as quickly as them [Green Action]. We are also lacking personnel… we just have to support them, and I think there are no negatives to this...

(Pak Mujirun, Head of Environmental Agency, interview 26 February 2015)

Green Action was undoubtedly providing a service that the Surabayan government was not in a position to provide. Green Action was working with many schools, providing training and competitions with support from private sponsors. Its members were also able to work with schools in a way that the government could not. The young staff at Green Action easily built a relationship with students and teachers, and principals felt at ease with the Green Action staff, as they were not employees of the Education Office.
Almost everyone with whom I spoke in Surabaya, from government, NGOs, and schools to the general public, agreed that the Surabayan government was doing a good job environmentally and this was clearly as a result of the leadership and example of Bu Risma. The Head of the Environmental Agency echoed the answers of various others when he explained it to me as follows:

Actually, the key is the example of our Mayor who always goes into the field and the like. The community know that the government doesn’t only talk, but they also join in [action]. Every Friday we work together (kerja bakti) in the field. If there is a flood, all officials go to the field. So, that gives the impression that the government isn’t all talk, but also takes action in the field. Secondly, it was always said that it is easy to build something, but to take care of it is difficult, and the government couldn’t take care of things. The Surabayan government has proven itself, for example, the case of the parks that have been maintained by the government, and that’s good, and it was the government who made the parks in Surabaya open [free].

(Pak Mujirun, Head of Environmental Agency, interview 26 February 2015)

The Surabayan government’s efforts to improve its city were impressive, and even more so when examined in the context of Indonesia and the Global South. Upon closer examination, however, it became evident that most of Surabaya’s environmental programs appear to be lacking what some scholars would label science (social and environmental science). There were no documented policies related to Surabaya’s greening and environmental efforts, so it was difficult to understand how Surabaya came to take the approach it did with some of its programs (described later in this chapter). I came to understand that the approach taken was not so much designed, as Global North education and environmental policy and programs might be, as built. It was built over time on the widely accepted Javanese tradition of leadership (albeit a female leader) and acceptance of directives from leaders (discussed further in the following chapter). The approach did not include teaching participants, teachers, leaders or advocates for the EE program and the science related to environmental problems. As a result, environmental explanations for projects provided by government officials, teachers and Green Action staff were baffling at times. For instance, one of the senior officials of the Office of Sanitation and Parks explained to me that the Office was asking villagers to compost their organic waste, and with that ‘There is a reduction in diarrhoea flies. Then from [selling] that compost, they can buy plants. The compost which is used for fertiliser has lots of oxygen,
so the village gets more oxygen and then respiratory diseases decrease, don’t they?" For the sake of politeness, I did not offer my understanding of the science in interviews, focus groups or discussions with teachers, students or government officials, unless asked. On the one occasion that I disagreed with a Green Action colleague on some ‘facts’ he was speaking about, he told me I was wrong and would not engage in conversation about it.

The Education Office

The opportunity to interview the Head of the Education Office came with no notice. I had been speaking at a seminar for junior high school teachers on integrating EE into the schools’ health program (UKS). As we left the seminar, I was informed by my Green Action colleague that I could meet Pak Imran (Head of the Education Office), but I needed to be quick. Green Action did not have the same close relationship with the Education Office that it had with the Environment Agency and the Office of Sanitation and Parks, as was evident in the demeanour of my two Green Action colleagues. One sat silently, only nodding his head and offering a very humble handshake at the beginning and end of the interview, and the other, the head of Green Action, Mas Rudi, was much more polite and formal in his approach in this meeting than he had been in the others. I was hoping for some insightful conversations about Surabaya’s unique approach to EE and the policy behind it. Instead what I got was Pak Imran constantly attributing the EE program to Green Action (much to Mas Rudi’s obvious delight) and dismissing my questions where possible.

The [EE] program came from Green Action. They were first, first with socialisation and grouping and the like. To be precise, the grand design came from Green Action. Then, because we have the same vision and mission, we only had to join the pre-existing program. So we only needed to facilitate the connection.

(Pak Imran, Head of the Education Office, interview 4 February 2015)

I felt certain that some of the praise and reluctance to acknowledge his office’s role in the EE program could be attributed to Mas Rudi’s presence in the room, but it became clear that this reluctance was also due to the fact that he was not particularly knowledgeable about the program, as his office played a small, supporting role in the delivery of EE to schools in Surabaya. This second point was later highlighted in my discussions with the Head of the Environmental Agency, when it was suggested that the Education Office had a ‘fear factor’ that scared schools into participating in Green Action activities.

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83 Interview with Office of Sanitation and Parks, 7 January 2015.
When I asked Pak Imran if the Education Office had a policy relating to EE, he could not give me a straight answer. He told me that, ‘It seems that there is already a section of the grand design to build Surabaya, other than education, health, environment. It is already in the City level policy, not just in the Education Office.’ I politely enquired where I might find such a document (the grand design). He asked Mas Rudi if it might be on their (Green Action’s) website, or maybe his own department’s. Mas Rudi replied that it was surely there, to which Pak Imran replied that it was ‘surely there’. I later searched both websites again and, quite predictably, found no such document.

Pak Imran was a busy man and fielded multiple phone calls during our 25-minute interview. He appeared to be somewhat uninterested in my questions, and his dismissive manner only changed when I raised the prospect of teacher exchange and cross-cultural learning (in reference to the reward that Green Action offers teachers). He was not interested in discussing the value or otherwise of Surabayan teachers going to Australia, as there was ‘no funding for that’, but was very interested in the idea of Australian teachers and students coming to Surabaya because he had two guest houses where they could stay. He gave me his business cards for the guest houses and suggested that maybe I would like to stay there too. Later that evening Mas Rudi was uncharacteristically friendly and chatty with me and informed me that Pak Imran had called him not long after my interview, asking him to come back immediately and talk to him and other managers of the Education Office about the opportunity for teachers to come to Surabaya. It seemed that this interview had given Mas Rudi the access to the Head of the Education Office that he had been wanting for some time.

Office of Sanitation and Parks

The interview with the Office of Sanitation and Parks contrasted with the interview with the Education Office. The atmosphere was relaxed and somewhat jovial. It was attended by Pak Candra (Head); his deputy, Pak Wanto; the man responsible for waste data, Pak Ipal (who joined us at times); myself; my colleague from UWA; and three Green Action colleagues (Mas Rudi, Rehan and Sumo). My Green Action colleagues made themselves at home, moving around the impressive office, slouching on the couches, helping themselves to food on the coffee table and using Pak Wanto’s computer while he spoke with me. The interview lasted just over an hour and a half, and at times Pak Candra left the room (to pray and attend to business) during which time we continued to chat with Pak Wanto and Pak Ipal.
With so many people in the room, all of whom were interested in the topics of conversation, the interview became more of a discussion amongst colleagues. The conversation started with me asking Pak Candra questions. Over the course of an hour and a half, the conversation moved to various topics, including Surabaya’s waste management approach and infrastructure (trucks, tracking systems, compost huts, landfill), parks and public spaces, working with other departmental offices and agencies, the characteristics and expectations of Surabayan people regarding their city and neighbourhoods (high rates of public participation and awareness, high expectations of their government), and community education approaches.

One of the education programs that Pak Candra spoke about the most was the traditional markets program. He described it as a program that aimed to ‘change mindsets’ and make the markets ‘clean’. Every day university students and school students (primary to senior high school) were expected to go to the local traditional market and change the mindset of the sellers so that they would sort their waste (into organic and inorganic).  

Now, we are trying it at Grebeg markets with the children. They [the traders] will be embarrassed if small children are already moving [environmentally speaking]. They [traders] will be embarrassed and then they must change.

(Pak Candra, Head of Office of Sanitation and Parks, interview 7 January 2015)

The markets program was still in its initial stages during my fieldwork, so it was impossible to judge whether it was successful in introducing waste separation. What was particularly interesting to me was the focus on separating, rather than reducing waste first, and on embarrassing or shaming people into action and using young children as the tool to do that. The use of children as messengers and ‘shamers’ is explored later in this thesis, including the opinions of some young people on their role in this and other programs.

The Environmental Agency

I took the opportunity to set up a meeting with Pak Mujirun, the Head of the Environmental Agency, when I was introduced to him by a Green Action colleague at a Sustainable Consumption and

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84 Traditional markets (as opposed to supermarkets and mini-markets) are generally held in an undercover market area each morning. Items sold include fruit and vegetables, meat and poultry, clothing and locally made snacks and drinks. Larger markets (such as Grebeg) also sell household items such as brooms, cooking utensils, kerosene cookers, etc.
Production launch. He was very warm and friendly and invited me to come to his office the following morning to conduct the interview. Pak Mujirun’s answers to my questions were considered and seemed quite honest. Unlike many other government officials with whom I spoke, Pak Mujirun was not afraid to admit that there were some challenges in facilitating EE in schools, and in particular with the Adiwiyata Program, and its focus on documentation and the capacity of teachers and principals to integrate environmental learning across different subjects (discussed in more detail in the following chapter).

My interview with Pak Mujirun started with him outlining to me the importance of focusing on the low socio-economic areas of Surabaya. He told me that the housing estates of middle to upper class were ‘of course, good’ and it was indeed the ‘high density slum areas’ that were the focus of the city’s clean and green program. The theory, he explained, was that if the neighbourhoods of people with less money were good and clean, then those with money would feel embarrassed and clean up their act. Avoiding shame and embarrassment (isin) and the desire to maintain harmonious social appearances (rukun) are strong influences upon behaviour in Javanese society (H. Geertz, 1989 [1961]) so it was understandable that Pak Mujirun might consider avoiding embarrassment a good motivator. It seemed strange to me to expect that the upper class would be inspired by the improved ‘slums’ (that they would be very unlikely to ever go to) and apply changes to their own housing estates. While I would not dispute the need for improved sanitation and infrastructure in the areas to which Pak Mujirun referred, I was surprised by the immediate dismissal of the need to work with the middle and upper classes. It is evident that the middle and upper class are keen consumers and include people of influence in this huge city. Clearly, all levels of society have a role to play in improving Surabaya’s natural environment.

The issue of the urban poor being subjected to the values of bourgeois environmentalism is not an issue specific to Indonesia. McFarlane (2008) describes bourgeois environmentalism in the Indian context as a notion that combines the political, economic, social and ecological, and that ‘discriminates between ‘good’ and ‘bad’ natures, such as between the park and the ‘unsanitary slum’, and privileges commodified socio-natures. In Indonesia and India, the concepts of cleanliness and sanitation are often involved in debates around greening the city and, therefore, urban greening usually includes disparate efforts to remove informal settlements and street hawkers (Kusno, 2011; McFarlane, 2008).85

85 See, Gandy (2008), Guha and Martinez-Alier (1997), Kusno (2011) and McFarlane (2008) for more on urban poor and bourgeois environmentalism.
González-Gaudiano (2016:119) suggests that the inclusion of ESD into the field of EE in recent years has brought globalising transitions and expectations that appear to safeguard the values, principles, and priorities of an economic system into which sustainability falls. He argues that the aspiration of ESD has reproduced an ‘obscene existing global inequality and ecological crisis without precedent in the history of the planet’. In short, he argues, ‘ESD perpetuates a system that produces social inequality (the poor) and environmental destruction (the mores).’ Surabaya’s approach to environmental change seemed to not only perpetuate a system that creates inequality, but also places the burden and blame on those most vulnerable to the negative consequences of continual development that ultimately benefits the city’s wealthiest.

I came to realise that Surabaya’s approach to EE and addressing environmental issues is largely to place the burden of change on those with the least voice: children and the lower class. The expectation was that these groups would influence others of much higher status in the community. Green Action and the Environmental Agency were avoiding taking on challenging the wealthy and powerful parts of society (and therefore avoiding confrontation). Javanese society’s social stratification serves to maintain social harmony (H. Geertz, 1989 [1961]; Guinness, 1986). Everyone involved in these programs would have been aware of their position in relation to others. I argue that the Javanese values of rukun, sungkan and nrimo played an important role in Green Action and the Environmental Agency designing a project that placed the burden of change on the least powerful in society, who are also in a lesser position to question or resist directives. It is important to note that the government officials themselves are mostly Javanese; although they may be in a higher social position than sellers in the market and school children, they are not of higher standing than many of Surabaya’s wealthy and highly educated business people. It is therefore difficult for the Green Action and the Environmental Agency to implement programs for the higher social groups without going against the longstanding habitus. Attempts to address issues with higher social groups would need to come from the Mayor or President in some cases, highlighting the importance of leadership at all levels.
The Adiwiyata Program

The Adiwiyata Program (as discussed in the preceding chapters) is the national environmental education program and is managed by the Environmental Agency at the city, district and provincial levels.

When asked about the possible challenges of integrating EE across the curriculum, Pak Mujirun admitted that, although it was compulsory for schools to integrate it, and therefore for all teachers to include it in their subjects, there were still some teachers who could not yet do it. This, he explained, was due to a lack of socialisation, which was the responsibility of principals. He told me that it was often the case that one teacher would be assigned responsibility for the environmental program and others would not feel the need to participate. This was evident during competitions: teachers who were not involved in the EE program, upon being asked to participate, felt confused (bingung) or unsure. He explained that the government had to teach teachers that EE was everybody’s responsibility – all teachers, students and parents. This sentiment from Pak Mujirun did not match the message in schools where year 12 students were not allowed to participate in environmental activities.

The Adiwiyata program is not held in such esteem in Surabaya as it is in other areas of Indonesia. Teachers, Green Action staff and government officials all reported that Adiwiyata focused too much on documentation and reporting, whereas the Surabayan approach was to focus on action. All of the Surabayan schools that I visited (15 in total) were involved in the Adiwiyata program, but instead of their EE program being the Adiwiyata Program (as was the case with the Yogyakarta schools), Adiwiyata was a part of their EE program, which also included the many activities facilitated by Green Action (outlined below in the section on Green Action). Despite having impressive environmental programs, some of the schools that I visited did not have high Adiwiyata rankings. Most schools attributed this to the excessive documentation and reporting required as part of the Adiwiyata program. The intense focus on numbers and reporting finds its place in the strong ‘audit culture’ that is prevalent in across the Indonesian education system. The focus on documentation and reporting has resulted in deceptive reporting practices in Adiwiyata and exclusion of students from reporting processes. See Chapter Seven for more on documentation and (not) cheating.

Pak Mujirun explained to me that the documentation required for Adiwiyata was, in some cases, more difficult than the environmental actions, and needed to be simplified. He argued that the environmental outcomes were more important than the documentation; if schools failed to do well
because of a lack of documentation, then that was ‘ironic’.86 Rather than lobby for change at a national level, Surabaya was integrating Adiwiyata into their EE programs; as a result, Adiwiyata was taking a back seat to the Surabaya Eco Schools Green Action program.

**Green Action and EE**

Mas Rudi is a guarded man. Despite our common interest in EE, and our relationship with an ENGO in Perth, and our three-year working relationship prior to, during and after fieldwork, I felt that we never developed the level of trust or honesty in our relationship for which I hoped. The reason for this lack of connection was difficult to pinpoint, but, over time, I observed his relationships with others and concluded that it was common for Mas Rudi to hold the details of the activities of Green Action to himself and share information with his staff on a strictly ‘need to know’ basis. In fact, there were many times when his staff members were left waiting to hear from Mas Rudi (via text message) what their next move should be. As a result of this lack of trust and ease, my conversations with Mas Rudi always felt cautious and restrained; at times, I doubted the accuracy of his responses. However, we had developed a mutually beneficial working relationship. He provided me easy access to EE in Surabaya, including his organisation. I provided him an avenue to the schools and government officials with which it had been difficult for him to engage. Perhaps most importantly, I was a white Westerner (see reference to the incident with Pak Sony later in this chapter). Green Action used my face on many advertisements, flyers, Facebook posts, website articles, newspaper articles and Instagram pictures in addition to having me adjudicate various competitions, speak at workshops, schools and be present at various community events. A white face draws attention in Surabaya, and Mas Rudi knew how to make the most of it. On more than one occasion, he directed me to only speak English. I usually chose to ignore this direction because I felt that it was not only an effort to enhance my foreignness, but was also an attempt to limit the communication between myself and others and, in doing so, increase his voice and his ability to dictate the situation (as the only other person who was confident to speak in English). I was acutely aware of Mas Rudi’s impact on my research in Surabaya, but decided that without his and Green Action’s involvement in my research, I would struggle to gain the breadth and depth of data that I was after and so decided to just manage my relationship with him and his impact on my research the best I could. Luckily, he was a busy man, so I spent less time with him and more time with the Green Action team, most of who were wonderfully accepting of me and made my time in Surabaya a fantastic experience.

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86 Interview with Pak Mujirun, Head of the Environmental Agency, 26 February 2016.
Green Action is based in a house in a new, upper-class housing estate on the east coast of Surabaya. The house is supplied by a supporter, Pak Edo. Pak Edo came to be a supporter of Green Action after his daughter was involved in Green Action activities at her primary school. I stayed in the guest room at Pak Edo’s family home on each of my trips to Surabaya at the insistence of Green Action. Pak Edo is a very wealthy business man and government employee and despite my intent to focus on senior high schools, Green Action insisted that I visit his daughters’ schools each time I was in Surabaya.

During my time with Green Action, there were six full-time staff (four male, two female), two part-timers, and for a few months there were three university students from Madura volunteering. At the very end of my fieldwork one of the senior high school students joined the organisation.

Mas Rudi (38-year old male) is the autonomous boss. Mas Rudi founded Green Action in 1999 as a result of his personal interest in the environment and his frustration at the ongoing issues of rubbish and litter in Surabaya. Mas Rudi spent very little time in the office while I was there, and the staff did not know his whereabouts. When I enquired, I was often told that he was picking up or dropping of his daughter to school or at the mosque praying or cleaning. Some days he came to office in the late afternoon, other days not at all. Staff never left the office before 7.00pm in case Mas Rudi would return to the office after early evening prayers (Maghrib) at the mosque. Mas Rudi was responsible for all decision making and planning, all financial transactions and overseeing all of the staff. He explained to me that he was not accountable to anyone and, in fact, the Education Office often relied on his opinions regarding the performance of principals in schools.

**Funding and support**

Green Action received funding from various private sponsors in the form of cash and in-kind support (e.g. the house used as the office). The government representatives with whom I spoke reported supporting Green Action in the following ways: providing venues and catering for Green Action events, providing prizes for schools, teachers and students (cash and environmental infrastructure such as water filters, shredding machines, rainwater tanks, solar panels) and making staff available to attend events. The government representatives never explicitly mentioned it, but they also provided Green Action access to schools and a level of legitimacy that other environmental education NGOs do not have. As I witnessed in Yogyakarta, NGOs struggle to gain access to schools without the support of the Education Office. The presence of government staff at Green Action events gave Green Action and the event a level of importance and legitimacy that it would not have had otherwise. Bu Risma herself
often attended prize-giving ceremonies, making Green Action events a big ticket event for teachers eager to make a good impression in an effort to boast their (civil servant) careers.

At the time of my research, Green Action was in the second year of a funding agreement with a private electricity supply company (who on-sell to the government). This company (referred to as PES from here on) supported Green Action as part of its corporate social responsibility (CSR) program. The full details of the sponsorship agreement were not made clear to me, despite my best efforts, but PES reported supplying the Eco-mobil (a specially fitted van, used for free school incursions and community events). See Figures 6.1, 6.2 and 6.3. The Eco-mobil was fitted with: solar panels to supply power to the large monitor, a computer, and audio system; a fold-out library with books in Indonesian and English on a range of environmental themes; and a range of educational resources, including a huge (5 metre x 5 metre) environmental-themed snakes and ladders game and compost bins. The Eco-mobil was also used at community events as a library and merchandise stand. The van was decorated with the sponsor’s stickers and environmentally-themed pictures. It was large and highly visible. Pak Birun, the driver, often struggled to fit it down narrow streets with low-hanging power lines in order to squeeze into school courtyards. In addition to the Eco-mobil, PES also sponsored the cross-cultural exchange trips to Perth, Western Australia (described in more detail below). The manager of the CRS program at PES, Mbak Oni, explained to me that PES chose to sponsor Green Action not only for its EE work, but also in recognition of its working relationship with the Surabayan government.

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87 Interview with the Manager for Corporate Social Responsibility, PES, 3 February 2015.
88 Interview with the Manager for Corporate Social Responsibility, PES, 3 February 2015.
Figure 6.1 Eco-mobil set up at Car Free Day event, with environmental games, library and videos

Source: Kelsie Prabawa-Sear

Figure 6.2 Eco-mobil library in use at Car Free Day

Source: Kelsie Prabawa-Sear
Leadership

Teamey (2007:5) suggests that non-state providers of services (such as NGOs) tend to be less hierarchical, more democratic and flexible than governments. While this was clearly the case with COP (as described in the previous chapter), it was not the case with Green Action. From a distance, Green Action might appear to be flexible, in that the staff would work all kinds of hours and would fulfil whichever roles were needed at any time. With closer observation, it was clear that the staff had little choice in the matter. Staff had no say over their working hours; they spent 12 hours at work most days (though not necessarily working the whole time); and they struggled to have days off. They felt that they had to do whatever job they were assigned, regardless of their experience, confidence or competence for the task. It is impossible to conclude that Green Action’s structure was less hierarchical than government because there was no clear organisational structure or hierarchy. It was an autonomous organisation with little structure beyond there being a leader and staff (albeit some older, some more highly educated and some more experienced than others). There was not one single instance that suggested Green Action was any type of democracy. There was, however, a clear social hierarchy, with Rudi at the top and the older men in the middle, the younger men below them, while the two young female staff members very clearly located at the bottom. So strong was Mas Rudi’s

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89 This is not referring to EE specifically.
power, that the fear of being reprimanded by him was a bigger motivator and influencer of behaviour for the two young female staff than was their concern for the environment, or anything else (including evening curfews). The following is just one occurrence where fear of reprimand influenced decision making.

In preparation for the cross-cultural exchange competition, Mbak Rani (19 years old) was sent to buy tea for the judges. I offered to accompany her, as I wanted to buy myself a coffee. She took a container for the pre-made tea (in order to avoid disposable plastic). The warung (street-side stall) did not have any tea ready, so Mbak Rani bought tea leaves and sugar. The seller put these items into a plastic bag. Mbak Rani did not refuse the plastic bag, as I expected her to (maintaining social harmony). As we entered the building (10 metres from the stall) she looked at me with panic and said, 'Oh no Kelsie, I have a plastic bag!' She quickly shove the plastic bag into a bin in the entrance way, placed the tea and sugar in the container and continued walking. Mbak Rani wasn’t concerned that she had taken the plastic for environmental reasons (surely it would have been more environmentally responsible to put it in her pocket to re-use later rather than disposing of it immediately). Her concern was that Mas Rudi would see it.

It was not only the young female staff who were submissive to Mas Rudi. On various occasions, Mas Rehan (24 years old) insisted that we sit and wait for Mas Rudi to arrive or send instructions via text message. This occurred when we had not eaten for many hours or could be waiting for an indefinite amount of time. I was never able to convince him that we should get a tea or coffee while we waited. The older staff members were more likely to disappear and ‘do their own thing’, and one bragged to me that he was too old to be scared of Mas Rudi. The power relations in this organisation had a substantial impact on my access to information. I recorded three interviews with staff, but felt it was clear that they were conscious of not speaking out of turn or telling me anything that they ‘should not’ (knowing one’s place). I found that it was much easier for everyone if I just observed and waited to ask questions when the time was right. I certainly learnt more about the running of the organisation from being involved in workshops than I did from any formal interviews. On occasion, when I was socialising with Green Action staff after hours, they would ask me my opinions about how Green Action was run. I always tried to answer diplomatically, but it was clear that we all struggled with Mas Rudi’s management approach and the long working hours that staff were expected to adhere to, often for weeks at a time without a day off. The staff told me that when they had voiced their dissatisfaction to Mas Rudi about the working hours in the past, he had told them that he was building their skills and
stamina: if they could work for Green Action, then they could work anywhere, even if they did not have a university degree. The three younger staff members seemed to accept this explanation.

Despite the questionable management practices and lack of transparency around finances, Green Action is leading the way in EE in Surabaya, and Indonesia.\(^90\) No other NGO has the same focus on EE and reach into schools. This naturally leads to the question of where they get their ideas, knowledge and methodologies from. According to Mas Rudi and the staff, the majority of the ‘facts’ come from the internet. Mas Rudi and his staff reported that they used a combination of Mas Rudi’s ideas and techniques that they (Rudi, Budi and Rehan) learnt from their experiences with Kids for Change, a Perth based-(Western Australia) ENGO. Ultimately, all ideas for activities, information, and ‘facts’ had to be presented to Mas Rudi for his approval or produced by Mas Rudi himself. All Powerpoint presentations, ideas for school activities, teacher training materials and workshops, competitions and judging criteria were created by Mas Rudi. One of his training sessions for teachers that I found most interesting was entitled ‘Mistaken Paradigms’ (paradigma keliru). This Powerpoint presentation highlighted in detail all of the things that he felt teachers were doing wrong in their environmental efforts. Rutherford (2007), following Foucault, suggests that power is not only about repression, but also about production, and that the power to produce knowledge about the environment is key in formulating the terms of its management. This was clearly true in Surabaya, where Mas Rudi was defining the environmental issues and the necessary solutions for both schools and the government offices, and in doing so had significant power and influence over how environmental issues were being managed.

**Green Action and Kids for Change**

Green Action and Kids for Change (KfC) have what KfC refers to as a ‘training partnership’.\(^91\) The opportunity for this partnership came about in 1999, when Mas Rudi travelled to Perth and attended a Scouts Leadership conference. The CEO of Kids for Change, Kit, was a presenter and facilitator at this conference and spoke to Mas Rudi’s group about the work of Clean Up Australia and Kids for Change. Mas Rudi later contacted Kit and asked if he could come to a KfC conference to learn and be mentored by Kit. Kit and her KfC colleagues saw this as a good opportunity to develop a partnership so they worked to make this happen. Mas Rudi came to the next conference that KfC ran. According to Kit, it

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\(^90\) Mas Rudi was awarded a Kalpataru Award by the President at the Presidential Palace in 2015 for his and Green Action’s work for the environment.

\(^91\) Interview with Kit, CEO of Kids for Change 13 March 2015.
was at about this point that Mas Rudi decided that he would like to start an organisation in Surabaya. Green Action and KfC were emerging not-for-profit organisations and decided that both organisations would benefit from such a partnership. The partnership has continued over 15 years, with groups coming to Perth most years (with a few years of no visits) and Kit self-funding four trips to Surabaya and one sponsored trip to Jakarta. With funding support from various Australian groups and PES, Mas Rudi has brought groups of Surabayan young people to Perth for the KfC conference annually. Each year, the Surabaya group stayed on after the three-day conference (lodging at Kit’s house), and visited Perth schools that were working with KfC, met KfC sponsors, and undertook environmental projects such as river revegetation.

In my interview with Kit, I asked about communication between the two ENGOs. Kit reported that the communication between the two organisations has been very limited other than in preparation for visits. She explained, ‘We don’t really get an update from Green Action about what they do with the information that they glean when they are here, but it’s really apparent when I visit Indonesia [that] the projects roll out of the programs that they have seen here’. I agreed with Kit, as I had seen first-hand in my school visits many projects and infrastructure that resulted indirectly from Perth visits. At one school, Mas Rudi showed me the water re-use system that captured water used to cleanse worshippers before prayer (air wudu). This water, which Mas Rudi described as clean water with prayers, was pumped to the school’s vegetable gardens. He informed me that this idea came to him when he was in Perth and saw how water was often re-used. This project and many others may have been born out of Perth visits, but there is no doubt that Mas Rudi’s ability to take an idea and turn it into reality in an environment such as a school, where traditions weigh heavy and change is not easily accepted, is something to be admired. Not only did Mas Rudi convince others of the value of these ideas, he sourced the necessary infrastructure, expertise and funding to make them a reality. The projects which resulted from ‘Perth ideas’ were not limited to re-using prayer water, but included rainwater tanks, solar panels, vertical gardens, plastic-free canteens and energy-use monitoring and reduction programs. These ‘Perth ideas’ were evident in various schools, and were all obtained as a prize for winning one of Green Action’s various competitions. The ‘Perth ideas’ were used in conjunction with environmental projects that are commonplace amongst Adiwiyata schools, such as biopori, fish ponds, and medicinal gardens. Kit described how she saw first-hand the results of Mas Rudi’s visit to the Grove Library in Perth and its grey water project. She described it as ‘just one example of how Rudi has taken a concept and applied it to the cultural setting in Surabaya. When I

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92 Interview with Kit, CEO of Kids for Change 13 March 2015.
93 Interview with Kit, CEO of Kids for Change 13 March 2015.
visited two years ago, he took me on a tour and pointed out the initiatives that had been inspired by that visit.

The Green Action and KfC partnership has been a rewarding partnership for Green Action and Surabaya, but the benefits to KfC are not so obvious. There have not been any Perth groups traveling to Surabaya over the 15 year partnership; although Perth students and teachers interact with Green Action guests when they are in Perth, it appears that this is almost entirely a one-way cultural flow. (See below for more on the cross-cultural exchange program.)

**Understanding environmental issues**

While the Green Action staff witnessed environmental actions taking place in Perth, they did not always understand the complexity and inter-relatedness of environmental, social and economic issues. I considered this a silo-type knowledge. On various occasions, Green Action staff demonstrated that their understanding of an issue was not systemic and was usually limited to a single cause and effect. Evidence of this was mostly when the staff (Mas Budi, Mas Rehan and occasionally Mas Rudi, though not so often) were presenting at teacher or student education seminars.

On the one hand, I felt that this lack of comprehension of the complexities of environmental issues should not be surprising, as Mas Budi and Mas Rudi were the only ones with tertiary-level education and neither of them had studied environmental issues in any formal setting. On the other hand, they had been working with KfC for many years and there was ample opportunity for learning and discussion. Mas Rehan and Mbak Anisa, who facilitated approximately 90 percent of presentations and education seminars with students, had high school education only. In the cases that I observed, Mas Rudi presented to teachers at training workshops, with one exception. This exception was a last-minute decision, one that really highlighted that Mas Rehan lacked the knowledge and understanding of environmental issues needed to present to this particular group of teachers.

This group was made up of teachers from my daughter’s school in Yogyakarta. The school (with my encouragement) had invited Green Action to facilitate a full-day professional learning workshop for the teachers. At that point, the school’s EE program was in its infancy (less than a year old), so we all thought it would be a good opportunity for the teachers to learn from Green Action as well as teachers from The Madrasah (described in the previous chapter). Mas Rudi was supposed to come to Yogyakarta to deliver the training. He had explained to me via text message that Mas Rehan ‘would be confused’ if the audience were teachers, suggesting that he knew that Mas Rehan’s knowledge and
experience were not suited to this audience (of Indonesian teachers at a British curriculum, independent community school). Despite these reservations, he sent Mas Rehan and a university volunteer, Mas Yoyok, to conduct the training. This, I was told, was because Mas Rudi had to act as a judge for a clean canteen and toilet competition for Surabayan schools. The pre-planning and organisation were lacking, and very frustrating, as I was acting as the intermediary, but this was nothing new to me, having watched Green Action arrange many other events. I was confident it would come together eventually. Mas Rehan and Mas Yoyok arrived in Yogyakarta by bus at 2.45am, were picked up by my husband, had a few hours’ sleep at our house before I woke them, gave them coffee and we made our way to the school.

There were eight teachers (seven female and one male) from the Community School and myself present. The group was made up of two early childhood specialists, a music specialist, two maths specialists, three science specialists, the two Madrasah teachers (who joined for a few hours) and me. The workshop was conducted in Indonesian, as I was the only non-Indonesian in attendance. Mas Rehan began the workshop with a brief introduction and moved on to a Powerpoint presentation which outlined some of the main environmental issues that the world is facing. Although he is a confident speaker and quite charismatic, it was clear to me that he did not have an in-depth understanding of the issues. I was quietly hoping that I was the only one who noticed this but it was not long before one of the senior science teachers raised her hand and challenged Mas Rehan’s information. She rather assertively informed him that the ‘greenhouse effect’ was a natural-occurring effect and should not be presented as a negative thing. I was confused for a second, thinking that she was questioning the existence of the greenhouse effect, but quickly realised her point. Mas Rehan looked a little confused, so I agreed with Ibu Nini and explained to the group that, yes, the greenhouse effect was indeed naturally occurring and very important in keeping the Earth at a liveable temperature, and that we should be careful to clarify that the issue is in-fact the enhanced greenhouse effect. This issue is included in the current Indonesian curriculum; I had observed a year 10 Geography class learning about this at The Madrasah. I had also previously been contracted by the Western Australian Government to develop an education package for year 5 students on this topic. Both of these points suggest that an environmental educator should understand the difference and comprehend the issue, particularly if he or she is teaching others about it.

This was not the only time during the workshop that Mas Rehan’s knowledge was found lacking by the other teachers. He kept the information as general as possible (at times relying on sweeping generalisations, such as ‘the earth is feeling blue’ (bumi lagi galau), and utilised emotion more than
fact. One of the resources he used was a video that showed one still picture after another of environmental disasters, including melting icebergs, burning forests, arid land, floods, oil spills, displaced people, salt lakes, and starving cattle. There was no explanation, just an emotive musical score with no lyrics, and the name of the continent where each disaster had (allegedly) occurred. Mas Rehan later struggled to explain coral bleaching when asked after showing a picture of colourless coral. He made mention of chlorophyll dying and that meant a loss of food for fish, which impacts on the amount of fish available to us. While this was not factually incorrect, it was a very small part of the issue, a part-understanding. There was no explanation of how or why coral bleaching occurs, nor of the broader implications of it (other than a loss of food for fish). I also watched as he explained to the group that Australians rely on rainwater and drink straight from their rainwater tanks without treating the water. The group were amazed and looked to me for confirmation (as if wondering why I had never told them this before). I told the group that some farming and rural families relied on rainwater, but most city households were connected to the main water supply and used rainwater tanks (if we had them) for our gardens. Mas Rehan’s and Green Action’s focus on emotion and part-understandings appeared to have been enough to satisfy most teachers in Surabaya, but the teachers at this school, and Ibu Nini in-particular, were not particularly impressed with this approach.

**Approach to EE**

The workshop with the Community School teachers highlighted that Green Action was used to providing information to students and teachers at a quite superficial level – presenting the ‘slogan’ and not presenting the complete issue. From our discussions and my observations, it seemed that Mas Rudi had a greater depth of understanding of environmental issues than his staff, but their approach to EE was the same, no matter who was facilitating. The resources that Mas Rehan used were resources (Powerpoint presentations) that I had seen Mas Rudi use with teachers in Surabaya.

Later, Ibu Nini and I had quite a long discussion about the importance of educators providing a clear, factual picture when teaching about environmental issues, and of allowing students to form their own views on what is right and wrong. Ibu Nini felt that Green Action members were not doing this, and were instead making generalisations (such as chemicals are bad, avoid chemicals) and were relying on emotional motivators over fact-based education. This view of Ibu Nini’s was one that I had not encountered with the 200 or so other teachers I had met during my field research. I asked Ibu Nini if she felt that this was a common way of thinking amongst educators in Indonesia. She told me no, it was not, and she felt that she had learnt this from her time teaching the New South Wales curriculum.
at an international school in Jakarta. She said she had learnt ‘the Australian way of teaching the science behind environmental issues, which makes it more balanced’.

**Training partners with contrasting approaches**

Although Green Action and KfC have been training partners for 14 years, the approaches to EE that the two organisations employ could not be more different. KfC facilitates a ten-step process with young people to envision a better future, to explore their local area and identify issues important to them (not only environmental issues – any issues), then create projects to address the issues about which they feel most passionate. This ten step process includes identifying mentors and working with organisations and professionals to achieve the aims of their projects. This process encompasses the five components of education for sustainability, as outlined by the Australian Research Institute in Education for Sustainability (ARIES), and also fits with the UN’s Decade of Education for Sustainable Development’s re-orientation of educational approaches. Green Action’s approach is what could be considered a more traditional approach to EE, as was popular in the 1980s in Australia (A. Gough, 2013; Wals & Dillon, 2013). Adults (government officials and Mas Rudi) identify the issue and plan how they would like the issue to be addressed by the schools. This approach most often means that students (and sometimes teachers) are given defined tasks in order to address an issue. The traditional market education program is a good example of this. The Office of Sanitation and Parks identified the amount of organic waste being generated at traditional markets as an issue, so the Office and Green Action designed a program wherein students would be responsible for influencing the behaviour of the sellers. As mentioned previously, this program does not aim to reduce the amount of waste produced, but to encourage sellers to separate their organic waste so that students can collect it and compost it at their schools. This program’s success relies heavily on elders doing what they are asked by students, and students working physically hard to compost many hundreds of kilograms of organic waste. (See the following chapter for a discussion that considers these two issues in detail.) Although this program would most likely achieve some environmental outcomes (organic waste is composted rather than being disposed of in landfill), it does not include four out of the five characteristics of education for sustainable development as defined by

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94 Envisioning a better future, critical thinking and reflection, participation, partnerships for change and systemic thinking.

95 Now called the Australian Research Institute for Environment and Sustainability.

96 Interdisciplinary and holistic learning, values-based learning, critically reflective thinking, multi-method approaches, participatory decision-making and locally relevant information.
UNESCO: envisioning, critical thinking and reflection, systemic thinking, and participation in decision-making (UNESCO, n.d.-a). Whether or not it includes building partnerships is questionable. This situation raises the question, if it does not meet UNESCO’s standards of characteristics of ESD, and Indonesia offers no standards or definitions of its own for EE, then on what basis can we define the traditional markets organic waste program as an EE program, and make a distinction between this and a government waste and composting program using unpaid child labour?97

The approach taken by Green Action and the Surabayan government is held up as an example to others in the local context. Pak Wanto from the Office of Sanitation and Parks informed me that as well as having government representatives from all over Indonesia come to Surabaya to learn about their approach to environmental management, they have also had guests from Timor Leste, Malaysia, Laos and Bangladesh. Despite the positive discourse from the government representatives and Green Action, I struggled to appreciate this approach, in which children were being used to undertake what I considered the responsibility of adults, and, in the case of the traditional markets, the responsibility of the Surabayan government. The Head of the Environmental Agency explained to me that by using children as messengers, we could avoid confrontation that might occur between adults.

We know that in Surabayan society, and maybe Indonesian society, if, for example, we do something bad, like litter, and are reminded by another adult, well, then, things could get messy. But if we are reminded by a child, no one will get angry with a child and they will surely be embarrassed...

(Pak Mujirun, Head of Environmental Agency, interview 26 February 2015)

While Javanese are motivated by avoidance of embarrassment and rarely show anger towards children, children are also given very little voice and are certainly not expected to be involved in adult issues (H. Geertz, 1959; Jay, 1969). Javanese children are not raised to voice their opinion (or necessarily have an opinion), nor to correct their parents (particularly not their father). Geertz (1989:150) describes the childhood years of ‘psychological preparations’ that Javanese children experience in order to develop the ‘ability to sharply inhibit one’s behaviour, to choose inaction rather than action’. The way a Javanese mother cares for her child (constant carrying and gently shaping the

97 Despite conducting an extensive literature review, I have not been able to find any documentation from Indonesia that defines or outlines what EE or ESD is. There is one line in the Adiwiyata Program Guidelines document that states that the Adiwiyata Program is ‘built on principles of education, participation and sustainability’ (Kementerian Lingkungan Hidup [Ministry of Environment], 2013:5). The principles to which it refers are not defined. Nomura (2009) explores Indonesia’s transition from EE to ESD, but differentiates ESD and EE by the topics covered (ESD includes social issues), rather than the approaches used.
child’s behaviour), Geertz argues, is ‘all in the direction of encouraging a deeply passive attitude’ (1989:150).

As described in Chapter Two, according to Bourdieu, habitus is a set of internalised principles, laid down in an individual during her/his earliest upbringing (Bourdieu, 1977a). Habitus is the precondition for the co-ordination of practices, but also for practices of co-ordination. Geertz’s description of the Javanese habitus is one of passivity and inaction, suggesting that it would be very difficult, if not impossible, for a child alone (without government incentives, fines, changes to laws) to alter the behaviour of adults. In 2004, Karol and Gale (2004) argued that the knowledge of environmentalism had not yet had time to be inducted into the habitus of Australian society, and was not yet part of family life. While their observations were made in an Australian context, and are probably no longer valid, it is clear that this is very true in the Javanese context.

Pak Mujirun, the Head of the Environmental Agency assured me, ‘If little children can be examples – little children can reprimand parents – then it is sure to have a big impact and have direct side effects...Kids have a big influence’.\(^98\) This approach is clearly in contrast to the social norms of Javanese society. I was reminded of this when reading a social media post by Animal Friends Jogja (AFJ) that had a picture of a kitten that a volunteer had saved from being drowned by three young children in a river in Yogyakarta. The post stated that when the AFJ volunteer asked the children why they were trying to drown the kitten, they had replied that they did not want to and felt that it was wrong, but they had been told to do so by their father. They reported feeling relieved when the AFJ volunteer stopped them and took the kitten (Animal Friends Jogja, 2016).

Bourdieu (1977a:81) cautions that in the case of class habitus, ‘“interpersonal” relations are never, except in appearance, individual-to-individual relationships and that the truth of the interaction is never entirely contained in the interaction’. In the case of the child in the marketplace, it is not simply a child speaking to an adult, it is a child, within a Javanese habitus, being told by an important adult with government connections (Mas Rudi) to ignore all social traditions and values and to instruct an elder how to behave and, in fact, embarrass them into changing their behaviour.

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\(^{98}\) Pak Mujirun, Head of Environmental Agency, interview 26 February 2015.
When I spoke to students, they did not feel that they had much influence over others. In almost every focus group students described how they were mocked and bullied by classmates for their environmental efforts and were told that they smelt like rubbish, called beggars, pickers and the like.99

Students from a high-achieving, well-known state school in Surabaya described to me how other students would throw rubbish so that the environmental cadets would pick it up.

Sometimes we have stuff thrown at us from the third storey when we are sorting the rubbish. The worst bullying is their throwing the rubbish so that we will pick it up again. We try to separate the waste and they call us disgusting.

(Focus group discussion with environmental cadets, Surabaya, 13 October 2014)

In a separate discussion, two female year 12 students from a very prestigious private Catholic school shared their views on bullying as part of the environmental program. One described being embarrassed by a teacher when encouraging her friend to turn off lights.

It’s like being belittled by a teacher... For example, I’ve had this happen, when you tell your friend to turn off the lights to conserve energy and the teacher says, ‘Oh, what are you doing? The school pays [for the electricity] you know’. Like that! And in the end it’s we who cop it.

(Interview with environmental cadets, Surabaya, 13 October 2014)

Similar stories to these were shared time and time again by students, suggesting that the methodology of children shaming others into action was indeed a flawed one. If these students were struggling to influence their peers, how could it be assumed that they could change the behaviour of elders?

I raised this issue with one of Surabaya’s most celebrated Eco-students. This young man, Fajar, was one of the winners of the cross-cultural exchange trip to Perth and later went on to work with Green Action. His honest response confirmed my concerns with the approach of expecting students to change the behaviours of those of higher social standing.

99 The verb (to) bully or be bullied (dibully) is taken from the English term but is usually used to describe a less vicious or hurtful treatment than the English word. I feel that the Indonesian use of the word translates more to being teased in English. I have also seen the term used to describe being pressured to do something.
I’ll be honest. In my family I have already told my parents, my younger sister, my older sister, ‘Please, when you go shopping, take one of the shopping bags that I have set aside’. But nothing changes – especially my parents. Maybe my older or younger sister might use them if I remind them as they are leaving, but not my parents. My mother says, ‘I’ll just use this one, that one will smell and it’s not enough for all the shopping’. Indeed, **educating the family is not as easy as we say...Especially in Surabaya. In our culture children have to obey elders, so it’s really, really difficult**, yeah, like the example I gave.

(Fajar, interview in Perth, 5 June 2015)

The apparent conflict between Green Action’s approach and Javanese societal expectations was perplexing at first. It was difficult to understand why Green Action would encourage this approach. It seems that this approach was based on the model that KfC used. Perhaps in an effort to make it less complex, the Green Action approach was missing some of the vital aspects of the KfC approach: the young people define the issues and decide on the projects, projects are age appropriate and aim to empower the young people, they are realistic in their goals and do not aim to change the behaviour of adults by simply telling them what to do.

While this approach to EE by the Surabayan government and Green Action may be far from UNESCO’s definition of EE, it is not uncommon for government departments globally to design and implement education programs without consultation or involvement in the design from young people, despite ongoing calls from EE and education researchers (Barratt Hacking et al., 2013; Prabawa-Sear & Baudains, 2011; Rickinson, 2010; J. Rudduck, 2002). Nagel (2005) argues that burdening young people with the responsibility of influencing elders’ behaviour may not only be ineffective in attaining environmental outcomes, it may lead to apathy towards the environment and an even greater sense of hopelessness. While some students with whom I spoke reported feeling unsupported in their environmental actions, most still appeared hopeful and enthusiastic, particularly when joining in group activities and Green Action events. The notable presence of optimism amongst Indonesian young people in what could be considered a challenging work market was reported by Nilan et al. (2011). The optimism of Indonesian youth noted in my research and in that of Nilan et al may be partly attributed to their strong religious faith and, possibly, the delightful naivety of youth.

Ojala (2011) highlights the importance of hope in pro-environmental behaviours and suggests that if students are feeling unsupported in their environmental actions, their levels of hope are likely to fall,
contributing to apathy. Green Action events, such as the YEL-YEL competition described below, which bring together many schools and hundreds of students from all over Surabaya, demonstrate to students that they are not alone in their environmental actions and that Surabayans are working together to improve the environment. Events such as these are very important in maintaining enthusiasm and hope for students and teachers alike in a culture that has a long-held apathy toward the environment (Koentjaraningrat, 1988 [1969]).

**Competitions**

Competitions (*lomba*) are a very popular way to draw a crowd in Indonesia (Creese, 2014; Long, 2007) and have been used for many decades as a means of community education (Sears, 1989) and state-driven institutional agendas (Creese, 2014). Green Action, with the support of the Surabayan government and private sponsors, had a continuous cycle of competitions for schools, principals, teachers and students.100 These included: Surabaya Eco Schools, Eco-preneur (eco entrepreneur) (of the week, month and year), Eco teacher (of the week, month and year), Eco student (of the week, month and year), Eco principal (of the week, month and year), YEL YEL Surabaya Eco Schools (dress-up and singing competition for high schools), Eco Schools jingle competition, green hours, poster drawing, Princess and Prince of the Environment (for primary school students) and the cross-cultural exchange competition (for students, teachers and principals). Most of these competitions were more acknowledgements of effort rather than competitions in the traditional sense. The YEL YEL Surabaya Eco Schools and the cross-cultural exchange selections were traditional competitions, and I had the privilege of being a judge for both competitions.

Mas Rudi explained to me that the competitions were very important to keep everyone motivated. I argue that it is not only participation in the competitions that motivates the teachers and principals, but also the opportunity to accumulate prestige (symbolic capital). When someone wins a competition (even something as small as Eco teacher of the week), they have their photograph posted onto Facebook, Instagram, Twitter and the Green Action website. The Eco teachers and principals know one another and know of each other’s accomplishments. Government officials are usually invited to be on the jury of the main competitions, and Bu Risma often presents the awards to the winners of the two main competitions. In a city that values environmental action, being known as a green teacher or principal is good for one’s career.

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100 These competitions are independent of and not associated with the Adiwiyata Program.
Pak Mujirun, Head of the Environmental Agency, explained that his agency supported the competitions, as it was an opportunity to educate parents. He told me that ‘when there is an event for students, parents definitely come. The way to educate parents is to educate children’. While this approach makes sense, its success depends on two factors: parents attending the event and the event being educational. The two major competitions that I attended (over five days) seemed to be lacking these factors, as outlined below.

The competitions can also be understood as an attempt to reinforce, or for new schools, to create a collective belief or identity as an environmental school. Bourdieusian theory, by participating in these large-scale competitions, the message (Surabaya is clean and green, we are Eco Schools, we conserve water etc) appears self-evident and is reduplicated, and the whole group’s adherence to that self-evidence is affirmed (Bourdieu, 1977). As described below, it appears that the messages are internalised by students, yet the behaviours which should accompany these messages are only practised in the school context. Even then, these behaviours are not normalised, meaning that the words are being internalised, but the matching behaviour is not, suggesting that it does not actually affect a transformation of habitus.

YEL-YEL Eco Schools

YEL-YEL Eco Schools is a competition run for junior and senior high schools. Each school creates a song or chant (about Surabaya Eco Schools) and performs it with accompanying dance, whilst wearing costumes made of ‘reuse’ materials. Junior and senior high schools compete in separate competitions. The competitions were held in public spaces (Taman Flora Bratang (park) for senior high schools on day one and Kenjeran Beach for junior high schools on day two). Hundreds of students attended and performed each day (26 senior high schools and 60 junior high schools), and there was a considerable crowd that gathered for the senior high school competition at Taman Flora Bratang. Very few parents of students were present at either day. There were a few small groups of friends of the performers at Taman Flora Bratang who cheered enthusiastically. The audience mostly consisted of interested passers-by. While the competitions were highly entertaining, very loud and colourful, with many bright costumes, the educational content was questionable. There were some large banners placed

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101 Pak Mujirun, Head of the Environmental Agency, interview 26 February 2015.
around the stage at Taman Flora Bratang, but audience members were not able to get close enough to read the print on the banners, while the competition was running. Some schools included an environmental message in their performance (mostly ‘do not litter’ and ‘conserve water’) but many schools stuck to chanting lines such as ‘Surabaya Eco School!’ and ‘Surabaya clean and green!’

The competition held at Kenjeran Beach had many more participants (I estimate 1000). Some schools had so many participants that they struggled to fit on the stage when performing. Schools were congratulated by the MC for having large numbers of students participate. There were, however, barely ten non-participating audience members. This, I assume, was because one must pay to enter the beach, and Indonesians tend to avoid the beach during the heat of the day. Each school group was accompanied by teachers, but, like the Taman Flora Bratang competition, there were very few (five or so) parents in attendance.

![Figure 6.4 The audience – other competitors and teachers with a few onlookers](Source: Kelsie Prabawa-Sear)

As one of the three judges, I was asked by Mas Rudi to give each school a score out of 100 based on their costumes and music. He informed me that all costumes and instruments must be made from re-used materials; otherwise, I was to give them a score of 0. On two occasions it was quite obvious that

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the school had purchased some of the costumes or used new materials to make costumes, so I asked Mas Rudi what he thought. On both occasions he told me that it was fine. I was unsure how to judge the music and was given no further direction on it. I felt that I was probably the least qualified of the three of us to judge this criterion. Mas Rudi was the second judge and gave scores on ‘compilation’, while Mas Aan, the representative from PES, gave scores on lyrics and movement. We did not discuss or share our scores, and Mas Rudi collected them at the end of the day. Throughout the day it was announced that pictures had already been uploaded to Instagram, Facebook and Twitter and students were encouraged to upload their own photos and use hashtags.

When writing up my field notes after two long hot days of judging the competition, I summarised the successes and missed opportunities of the competition as follows (edited):

**Success**

- Indoctrination: It felt very indoctrination-like, with the continual chanting of the slogans (Surabaya Eco Schools, Surabaya clean and green, conserve water). Over and over and over again. The kids sang with such gusto that it seemed that they were really into the message.

  Example of lyrics used by one school (my translation)

  **Song 1:**
  Surabaya, Surabaya, oh Surabaya,
  Environmental city, environmental city,
  Clean and green,
  Here, here, in Surabaya
  First, first
  Adiwiyata

  Surabaya Eco-school,
  Save electricity, plant trees, conserve water,
  Surabaya Eco-school,

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102 I was unclear on how my criterion of ‘music’ differed from Mas Rudi’s criteria of ‘compilation’. The criteria did not seem to be of much importance to Mas Rudi. See Long (2007) for an excellent description of lomba (competition) and all its complexity.

103 While this would not be a criterion of success in EE generally, it appeared to be something that was very important in this competition. Students and teachers chanted over and over again the same messages.
Look after the environment from now on for the future.

Song 2:

[To the tune of a popular children’s nursery rhyme] Potong Bebek

Anggsa.

We are Sempronk [school’s nickname] kids, Adiwiyata kids,
Looking after the environment for health,
Throwing rubbish in the bin,
Clean school, la la la la la la,
Throwing rubbish in the bin.

- Community building: There was a great feeling of comradery and community. The large number of schools and students participating indicates to participants that they are part of something bigger, a Surabaya-wide approach to going green.  

Missed opportunities

- Massive amounts of waste. Although the costumes were to be made from re-used materials, I have my doubts about the plastic bags. The number of bags used was crazy. There was also a lot of litter from the costumes and snacks. Mas Rudi and Mas Rehan told performers to clean up after themselves, but this did little to stem the flow of litter.

- Lack of feedback from Green Action to participants. Feedback could have been on reducing waste in the performances for a start. Other ideas would be: kids design the production, write songs, make costumes, encouraging difference (they all just love to be the same!!), sharing stories through performance, not just chanting slogans.

- The messages were shallow. Performances tended to focus on repeating messages with little meaning, ‘conserve water’, ‘conserve electricity’. Not much focus on how. About 2 schools included examples of how. Really felt like lots of chanting of indoctrination messages and little consideration of how or what. I would have loved to have seen an actual story of their actions.

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104 This is an important aspect of any EE program, as it is often the case that environmental teachers and students feel unsupported in their efforts.
• Overall I got the impression that the lomba (competition) and prestige that goes with participating in and winning is more important than the message that the schools were meant to be conveying. Perhaps the message was considered in the judging of the lyrics, but I’m not convinced that happened. It would be great (in my opinion) to see a category of judgement for the message or theme. I would have LOVED to have seen a school that had a reduce or minimise waste theme and avoided all the waste!!

(Field notes, 12 October 2014)

The winners of the competitions were not announced at the event, but were announced online later. This was a very clever tactic to draw the students and teachers to Green Action’s social media feeds. There was no obvious dissatisfaction with this outcome by students or teachers who appeared to be used to this approach for announcing winners.

Cross-cultural exchange selections

The cross-cultural exchange selections were a less glitzy competition. They were held in a government building and only attended by competitors and judges. Only one parent came to watch their child compete for a chance to represent Surabaya in the exchange to Perth. Had any other parents (or families of teachers and principals) attended, it would have been an excellent opportunity for them to learn of the work for the environment that is happening in the schools.

In order to be eligible to compete, teachers and students had to have completed 50 green hours in the past four months. Green hours are hours of work for the environment that have been logged and signed off by a teacher (for students). These hours can only be accrued by undertaking physical work (composting, planting trees, making biopori) and socialisation work (working with others to encourage them to be more environmental, working with neighbouring schools in one’s own neighbourhood on a project). Mas Rudi was very clear that ceremonial activities did not count.

In addition to a three-minute presentation in English entitled ‘My Actions’ (Kiprahku), students were required to submit an essay of the same title. Teachers and principals were only required to do the

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105 While Green Action called it a ‘cross-cultural exchange’, this title referred only to the trip itself, not to any ethos, values or principles of a cross-cultural exchange. There was no pre-trip cultural training and no post-trip debrief; there was no exchange of personnel; and there was very little evidence of cross-cultural learning by either group during the trip.
oral presentation. The competition was open to students of all ages. Two students, two teachers and
one principal were selected as winners, with the prize being a trip to Perth to attend a KfC conference,
meet other environmental students and teachers, visit environmental projects and learn more about
Western Australia. The participants were judged by a panel. I was a judge for all three categories.

The afternoon before the selections I had asked Mas Rehan if this was going to be a real selection
process or if Mas Rudi would just pick whomever he wanted. Mas Rehan smiled (knowingly) and said,
‘We’ll write notes on each one’. I gave him a disapproving look to which he replied, ‘Maybe we could
select three or so’ (implying that Mas Rudi would pick from them). Later that night, the younger staff
members and I were hanging around the office, waiting for the rain to stop. Mas Rehan and Mbak
Anisa were grumbling (in Javanese) that Mas Rudi wanted to take his six-year-old daughter to
Australia. Mas Rehan asked Mbak Anisa whether they were organising family tourism or cross-cultural
exchange. Mas Rehan and I had discussed the opportunity for families to pay for their children to
join trips to Australia early that month after a mother had come to the Green Action office with her
son to enquire about a replacement trophy for her son. He was a finalist in the Prince and Princess of
the environment awards, and the school had decided to keep his trophy to display in the school trophy
cabinet. The mother was quite pushy in her approach and asked Mas Rehan if her child could go on
the next trip to Australia. She asked if she could reserve a place for her son, complaining that last time
they only found out about the trip when the group left and she felt shocked as her son wanted to go.
During this somewhat one-sided conversation Mas Rehan was polite, but made it clear that it was Mas
Rudi who arranges the trips (and Mas Rudi was not there at that time). The mother and son left the
office, and the son re-appeared minutes later with a huge bag of snacks for us. Mas Rehan did not
show any surprise at what had just occurred. I saw it as an attempt to win favour. I asked Mas Rehan
about the possibility of buying a place on the trip; he explained that this was only possible for the
Prince and Princess trip, not the cross-cultural exchange. The victorious Princess and Prince win a free
trip, then it is open to others if they can pay their own way. He hinted that there may have to be
changes to this set-up for future visits, as Mas Budi took a group of primary school children by himself
last year and Kit (CEO of KfC and host to the group) was unimpressed by the lack of adult supervision
and told Green Action that if they wanted to do such a trip again, they would need more responsible
adults, of which at least one must be female.

The judging panel for students’ cross-cultural selection was Mas Rehan and myself. I had asked not to
be involved in any official sense so that I could observe and take notes at my leisure. Due to a lack of

106 Mas Rudi’s daughter did not come on the cross-cultural exchange trip that year.
available staff and invited judges being unavailable, Mas Rehan and I were the reluctant MCs and judges for the day. The judging panel for the teachers and principals consisted of Mas Rudi, a representative from the Office of Sanitation and Parks, Mas Aan from PES, and myself.

Students

There were 44 presentations over the course of the day, with presentations from: eight primary schools, 25 junior high schools (SMP), seven senior high schools (SMA) and four vocational senior high schools (SMK). There were a few presentations where students were joined by a couple of friends. This confused me, as it was clear that this was an individual competition, and I wondered what they expected would happen if they won. This was not a problem in the end, as the group presentations were not considered good enough to earn a place.

Although the theme was ‘My Actions’, most students presented a list of all the activities that their school undertook, not indicating with which of these they themselves were involved. Mas Rehan reminded the group to highlight their actions for us judges, but all of the students had prepared their Powerpoint presentations and some of them had memorised their presentation in English, so there was no veering off the path, despite Mas Rehan’s request. The Powerpoint presentations were mostly very similar, with pictures of European landscapes, sparkling rivers and deciduous trees combined with photos of groups of students composting, pictures of handicrafts made from re-used packaging and students making biopori holes. Headings were mainly in English, and content was mostly in Indonesian. The students appeared to give no thought to the fact that I was one of the judges and might not know the acronyms they were using. They spoke to the audience (other presenters and some teachers), which was seated directly in front of them (we sat to the side). Very few audience members listened to others; most walked around and rehearsed their own presentations while waiting for their turn.

Mas Rehan and I listened to the presentations, taking turns to ask a question at the end of each presentation. My questions were mostly the same for each student, in an effort to have them try and answer in English. I would ask ‘What is your favourite activity?’ and would pronounce favourite as it is said in Indonesian, favorit. I thought that this might be simple enough for the first few students, and any that followed would work out that I was asking the same question for almost all of them. Unfortunately, no-one seemed to be paying attention to the questions that others were being asked, so each time that I asked this question I was met with looks of horror and had to repeat it in Indonesian. The lack of ability to comprehend this simple question raised my concern about how much value most of these students would get out of a trip to Perth, if their English communication skills
were so limited. Whatever concerns I had for students’ English communication skills on day one were multiplied at the principals’ selection day.

Fajar

There was one presentation that stood out from the others. This was Fajar’s presentation. Unlike the other students, Fajar highlighted his personal commitment to improving the environment (where others seemed to only participate in school-based activities) and explained his personal actions at home, with friends and in a leadership role in his school’s environmental group. Fajar had clearly put significant effort into preparing his presentation, which had impressive visual effects, pictures of the environmental initiatives that he had introduced to his family and photos of him undertaking many environmental projects at school and with Green Action. Where others gave the impression that all these environmental activities went smoothly and without issue, Fajar provided examples of some of the difficulties that he had faced and how he had worked to overcome them. He had memorised his presentation and spoke in English throughout. I congratulated Fajar on his efforts when we were chatting at the end of the day. I commented that his presentation was really related to the theme and not just a list of things that his school does. He told me that he had worked hard on it and had asked Mas Rehan for feedback. After applying and being unsuccessful the previous year, he said he was determined to get it right this year. I asked Mas Rehan later what tips he had given Fajar. He said that he advised him to not just provide a list of activities and say that he was the leader, but to explain what the problems were and how he had worked to solve these problems both at school and at home.

Titis

One female junior high school student’s presentation highlighted a major shortcoming of Green Action’s approach to EE. This student, Titis, gave a 12-minute presentation in Indonesian on climate change.\(^\text{107}\) She provided one jam-packed slide after another, describing in great detail the dangers and impacts of climate change. After reading each word on each slide, Titis was required to answer a question from the jury. I asked her (in Indonesian) what actions she does for the environment. She replied that she conserves water and the like. I then asked, ‘Is the relationship (\textit{hubungan}) between climate change and your actions clear to you?’ Titis replied, ‘No, not clear’. She chose to leave it at that, and so did I. Titis was not an uninterested, disengaged student at the back of a classroom. She was a high-achieving, enthusiastic environmentalist in the eyes of her school and presumably Green Action. She had clearly spent many hours preparing Powerpoint slides that were full of information

\(^{107}\) This was despite participants being asked to keep presentations to three minutes and to present in English.
and had probably spent hours practising reading every single word so that when her time came, she could read those scientific words and phrases with fluency. What she did not know to learn (memorise) was the relationships, the connections and the meaning. Her environmental education (and possibly her general education) had failed her by not developing her ability to make the connections or think critically. She had a siloed, or part-understanding of the issue. This example mirrors the student in the preceding chapter who knew what *biopori* was for, but did not know where water would drain to if there were no *biopori*.

Gruenewald (2004) suggests that one of the central problems with EE is the widespread lack of connection between social analysis (analysis of human systems) and ecological analysis (analysis of ecosystems). The examples provided in this chapter and the preceding one, demonstrate that the EE that these students had experienced had failed in helping these bright, concerned and enthusiastic learners to understand the interrelatedness of issues and humankind’s active role in these issues. Due to a lack of environmental content in the curriculum, students learn very little about environmental issues and what they do know is whatever information that they have been given, which is always presented in a vacuum, with no context, no linking to other issues or to humankind’s role in causing and enhancing issues. It appeared that almost every student in the competitions knew of the environmental issues and that they must do a certain thing to help it, but there was no thinking beyond that. For example, students knew that they needed to make *biopori* holes to stop the flooding and that rubbish in rivers causes floods, so we need to throw it in the bin, not the river. Sometimes students confused environmental issues and related behaviours. For example, one student explained to me that he liked growing trees to get more oxygen for the ozone layer. In the case of Titis, the knowledge of the issue was there (typed into Powerpoint slides at least), but related behaviours were a mystery.

After watching the 44 presentations it was clear that the students were very proud of their environmental endeavours. They were happy to sort waste, make compost and tell others what to do (*sosialisasi*), but hardly any seemed to have given any thought to reducing waste. I asked two or three of the better presenters about reducing waste, and they answered by referring to their recycling programs at school. Only one student made mention in his presentation of bringing a drink bottle to school and trying to reduce the amount of plastic packaging he used. When I spoke about this with Mas Rehan, he told me that they all do it (reducing waste), but they did not mention it.
Despite my concerns at the presenters’ demonstrated lack of understanding of the interconnectedness of environmental issues and human actions, I enjoyed watching students proudly represent their schools and try their best to do so in a second language. I also felt great appreciation for these students, as it was the hard work of students such as these that has contributed to turning Surabaya into a much more pleasant and healthy city. While the EE quality was questionable, there was no question that these students were trying very hard, and they should be congratulated for that.

Principals and Teachers

There were eight presentations by school principals, though one was presented by a teacher on behalf of her principal who was unable to attend. Of the eight, there were two male and six female presenters. Three of the principals presented in English, though one of these reverted to Indonesian at some points where she felt that she was struggling to convey herself clearly.

Twenty-two teachers presented on the final day of the selections, 18 female and four male. One male teacher apologised and admitted that he had Google-translated the whole presentation, so it might not make much sense. Most of the teachers switched between the two languages, but ten used mostly English, three used about half and half and nine presented completely in Indonesian. A couple of teachers voiced their concern that others had not stuck to the time limits and that those presenting in Indonesian had an advantage as they could communicate more easily. As a judge, I was not willing to select a winner to go to Perth if they were not brave enough to try and present in English, or if they could not stick to the rules (one teacher spoke for approximately twenty minutes before Mas Rudi interrupted her at my urging). 108

A young female principal of an Islamic primary school, Ibu Aliah, gave a very emotional presentation that highlighted her mission to make her school an Islamic school that really cared about the environment, to represent Islam, and to inspire other Islamic schools to join the Surabaya Eco Schools Program. She had tears as she proudly shared the achievements of her school and how in just two years they had become one of the top five Eco Schools in Surabaya. She acknowledged the hard work of her staff and pointed out two teachers who were sitting in the audience. Like Fajar, she acknowledged that it had not been an easy road. When it was question time, I suggested to Ibu Aliah

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108 At the end of the teacher selection day, the judges’ table was filled with items brought in by the teachers for the judges to try. These were mostly food and drink made by the schools out of produce grown in the school gardens. Items included fried spinach crackers, fruit syrup, ice-cream and bananas. There were also bags of compost and various items made from re-use materials.
that I thought that others could learn from her and asked her what she could help to teach others if she went to Perth. She replied, ‘You can get information from the internet. The difficult thing is how to motivate and include [others]. It’s like flying a kite, pulling and releasing. I could share that.’ Ibu Aliah’s presentation was refreshingly honest and heartfelt. She acknowledged the challenges and told how the team were working to overcome them. This open and honest presentation was unlike any of the others.

The principal who presented before Ibu Aliah took a different approach, presenting in a matter-of-fact way that made it seem as if bringing about change at the school was easy. She told us that when the program first started, the school had had some problems with parents not supporting it, but then ‘we did socialisation and now they all understand (paham semua)’. When I asked this principal what she thought she could learn, or teach others by doing the exchange, she relied that she hoped that she could represent Surabaya well. Her reliance on superficial, oversimplified and well-rehearsed answers was not uncommon amongst principals and teachers with whom I spoke over the course of my fieldwork. The expectation that one will represent oneself, one’s school or even one’s family, village, city or country in a positive way outweighs any expectation that one would be completely truthful.

For most, the idea of highlighting and discussing difficulties and failures would be rather shameful. When the representative from the Office of Sanitation and Parks asked a teacher about the school’s efforts to reduce waste, instead of outlining the efforts, or even the future plans, the male teacher lowered his gaze and apologised, ‘I’m sorry, Pak, it’s not optimal’. The response was somewhat unusual in the context of a competition where the participants were supposed to be convincing judges of their achievements and merits to win the trip to Australia. The response was, however, very Javanese. The male teacher was speaking to a man of higher social standing (a high-ranking government official) who had been somewhat belligerent in his questioning of other teachers, often turning away from the speaker to display his dissatisfaction with answers. I was quite horrified when, after asking another teacher a question, he answered a phone call and held a conversation while the teacher was still speaking. Over the course of the morning, this man had placed himself above the rest of us in the room with his way of speaking and body language. I believe that the male teacher was acknowledging the government official’s position in his answer. By admitting that the school’s waste reduction efforts were not optimal, he saved himself the embarrassment of being told so by the government official.
This reluctance to discuss difficulties and failures prevents environmental teachers from being able to work together on solutions or to provide advice and support to one another. The competitive nature of the Surabaya Eco Schools Program most likely further inhibits this, as any teacher who wanted to be crowned Eco Teacher of the Week, month or year would surely be reluctant to highlight failures and challenges in his or her school, or to provide tips to others.

**Symbolic capital**

The Green Action EE program (Surabaya Eco Schools) is very popular in Surabayan schools. Whereas the Adiwiyata program offers schools an opportunity to gain prestige through moving up the Adiwiyata ranks, the Green Action program offers prestige and distinction (symbolic capital) for schools and individuals through its relentless social media campaigns and strong links to government. In addition to this, it offers cash prizes, environmental resources and the chance to travel to Australia. Mas Rudi understands that most of the adult participants are not motivated by an intrinsic concern for the environment, but by reward and opportunity. For those who are intrinsically motivated (and I believe I met some), the reward and opportunity that come with the program are bonuses, and the recognition of one’s work is always appreciated. Although the titles (Eco teacher, Eco principal, Eco-preneur) are won as a result of one’s environmental merits, Mas Rudi certainly manages the rewards and is very strategic and thoughtful about who wins what when.

Whilst having lunch with Mas Rudi after the cross-culture exchange selections, I asked him if he felt bad for a particular principal and teacher who had been long-serving environmental educators. Despite their amazing efforts, they were not selected to go to Australia that year. He told me, ‘Yes, of course. They have worked so hard for many years and will be very disappointed’. I asked if he would explain to them why they were not selected. ‘No. No.’ He told me, ‘There’s too many to explain. It’d be never ending. We don’t talk about it. They’ll get other rewards’. When I had commented earlier in the day that I thought a particular principal had done well in the selections presentation, Mas Rudi replied, ‘Yes, but he’s Eco Principal of the Year. That’s a big reward’.

There were many more minor rewards on offer for schools too. This included: a free visit and incursion from the *Eco-mobil*; a good word to officials at the Education Office (which may aid one’s career progression); selection to speak on television or radio; a visit from me or the American Consul General’s wife; and photographs in the local paper. Many of the teachers and principals were not afraid to ask for visits. Many teachers asked Mas Rudi and me when I would come to visit their school. Some were more polite than others; despite my limited time in Surabaya and packed schedule, I
usually tried to meet these requests, as I wanted to support their efforts and if I could help motivate others, I was happy to do so. There was one occasion where it was clear that the request for me to come to the school had nothing to do with the environmental program and everything to do with a display of power. The following (edited) field notes summarise the event that occurred just prior to the principal cross-cultural selection. The principal with the most offensive behaviour did not realise that I spoke Indonesian at the time. Mas Rudi knew that I understood every word.

One principal arrives [Pak Sony]. He’s wearing the pramuka [Scouts] uniform. Looks funny as he is a big man and he looks like a giant kid. Eventually he came to sit near me [I’m drinking my coffee]. He asks the usual questions. Another male principal arrives and sits next to Pak Sony, across from me, and starts talking about me, referring to me as si cantik [beautiful] and bulu [white one]. Right in front of me. Yells out across the room to Mas Rudi, ‘When’s she coming to our school, the bulu?’ Mas Rudi: ‘After this!’ Then tells me I’ll go there after this. I get up and walk away. Furious. I tell Mas Rehan that they are showing me no respect and I won’t be going to that man’s school today. Mas Rehan: ‘Why? What?’ I tell Mas Rehan, I’m happy to do these things if it’s about LH [the environment], but it’s not, why do they want me there? So they can have a photo of the bulu.¹⁰⁹

(Field notes, 28 February 2015)

Arguably, the most rewarded and celebrated Eco student in Surabaya was Nadine, daughter of Green Action’s biggest private sponsor and supporter, Pak Edo. Nadine’s primary school, the favorit public primary school in Surabaya, was Green Action’s premier Eco School. At the time of my fieldwork, Nadine had graduated to junior high school, and her younger sister was attending the same primary school. For this reason, I went to the school on most of my trips to Surabaya (at the request of their father to Green Action). Whilst at this school in 2012, Nadine was crowned Princess of the Environment (Putri Lingkungan). She travelled to Australia as the winner, had appeared on local television and radio, in newspapers prior to and after her return and was often featured in Green Action’s social media posts. When Mas Rudi was awarded the Kalpataru Award by the President at the Presidential Palace in 2015, Nadine was invited by Mas Rudi to come and meet the President. I came to know Nadine quite well during my field work, as I stayed at her house and went out with her family on various occasions. I also made two visits to her current school and both times she was one of the

¹⁰⁹ I did not go to the school, and that principal did not win the trip to Australia.
students responsible for showing me around. Nadine is a lovely young woman. She is bright and beautiful, but she is by no means the most dedicated environmentalist in Surabaya.

Cross-cultural exchange in Perth

The team selected to go to Australia was made up of all of my preferred applicants from the cross-cultural selection days, with one exception. The exception was a boy from junior high school, Agung. Mas Rudi and Rehan had mentioned Agung as a possible candidate for a place when we judges were discussing winners. I had to consult my notes to try to remember which one he was, as he was not in my top four students. Mas Rehan told me later that Agung had not presented himself well and he was actually much more active than it seemed. Whilst on the trip to Perth, Agung appeared uninterested a lot of the time and was reluctant to join in group activities. His English skills were at a complete beginner level, so his ability to interact with anyone outside of the Surabayan group was limited. The two teachers and principal who were on the exchange all complained to me at different times and asked how it was that Agung had been selected to come along. I had to agree with them that he was not ready for such an experience and explained that Mas Rudi had made that selection against my recommendation. The other winners were Fajar (senior high school student), Pak Yusuf (male primary school teacher), Ibu Lani (female senior high school teacher) and Ibu Aliah (Islamic primary school principal), and they were accompanied by Mas Budi and Mas Rehan from Green Action and Mas Aan, representing the trip sponsor (PEC). I arrived in Perth before the group and met them on their first night at Kit and her partner John’s house when they arrived. I spent most days with the group, acting as a translator, cultural advisor (not that they asked) and participant observer before going home to my family in the late afternoon.\textsuperscript{110}

There were various cultural difficulties that left Kit and the group bemused and sometimes annoyed at one another, and I often found myself having to explain the position and actions of one to the other. I was horrified on the first night to see Ibu Aliah refuse to shake hands with John, the owner of the house where she would stay for the week.\textsuperscript{111} I was equally horrified to learn that no one took the group to the airport at the end of the stay, but were given the number of a taxi company instead.

\textsuperscript{110} See Appendix 1 for the original agenda for the trip.
\textsuperscript{111} While shaking hands is an everyday practice for most Muslims in Indonesia, some will refuse to touch (including shaking the hand of) a non-family member of the opposite sex, as it is said to be not permissible according to the teachings of Islam (as it may lead to temptation). I later spoke to Ibu Aliah about this cultural difference and suggested that if she was going to refuse to shake hands with men, she would need to explain to them why. No doubt this was an uncomfortable proposal for her and she was careful to wear gloves thereafter, therefore avoiding the uncomfortable situation. I saw her shake hands with a male Principal at a school we visited a few days later, whilst wearing gloves.
There were many small gripes in-between, but Kit, John and the visitors were all very gracious in accepting that these were cultural differences and were to be expected and accepted. I felt that both groups could have done with a few lessons in the basic courtesies of the other’s culture; this would have avoided some of the tension over the week. Kit and I also had an expectation that the group would actively participate in the events and activities during their stay. It became evident over the course of the week that some (such as Ibu Aliah) were more enthusiastic than others. Where Kit saw this visit as a learning and training opportunity, the visitors seemed to view it more as a trip to Perth where they could passively observe the work of others. Without question, the lack of English skills amongst the group made participation difficult, and Kit’s lack of Indonesian language and cultural knowledge did not help either. I acted as translator where possible, but the group was often separated and on such occasions I usually chose to go with the students as I felt that they needed the most support. Mas Rehan and Mas Budi seemed to have no interest in doing this, and were always busy documenting the group’s moves by videoing and taking photographs or sitting away from the group typing up reports and social media posts. Despite these difficulties, the group all reported that they were inspired by the trip and had learnt some important things to take back to Surabaya. Most of the group commented that they were surprised that each project began with a question from a student at the KfC conference. Fajar told another adult at the conference that the difference was that, ‘In Surabaya we have the problem and we solve it. Here, we find the problem’. He later re-iterated this in a recorded interview with me.

Yeah, this is so, so different to Indonesia. In Indonesia the problem is already defined, we just have to find the solution – that’s the hard bit. We have the problem, but here [in Australia], which we could say is generally good, it’s only how to maintain this good situation. So here, we learn while we discover. In Indonesia we learn what has already been discovered.

(Fajar, interview in Perth, 5 June 2015)

Mas Rehan and Ibu Aliah told me that they had learnt that ‘kids make a change by creating a simple question and find an adult to help connect their ideas’ and ‘it becomes a different spirit when it comes from within, not just from the principal or teacher’. The cross-cultural exchange participants certainly saw a different way of facilitating EE and environmental learning. The challenge for this group was whether this approach could be adapted to a Surabayan setting. Ibu Aliah was very excited by the idea, but at the same time felt that it would be very challenging to convince her staff and parents of the value of it.
Decisions about which schools I visited in Surabaya were made by Mas Rudi. I requested to see a variety of schools: those just starting out; those who had well established programs as well as some favorit schools and not so well resourced schools; public and private; and general senior high schools and vocational senior high schools. I visited 15 schools during the course of my field research and spoke to approximately a hundred students at schools and Green Action events. I made some school visits in order to conduct focus group discussions, and others were with the Eco-mobil to observe how Green Action conducted its school incursions. Of the 15 schools that I visited in Surabaya, all but two were already participating in the Green Action program. The visit to one of these non-participating schools was particularly insightful into the approach that Green Action took when the school administration was not interested.

Prior to arriving at the school, Green Action staff had not told me that they were not currently working with this school, had been finding it difficult to get into the school, and had therefore not sought permission to visit prior to our arrival. That day I was visiting schools with a research assistant from UWA who was also collecting data for the same research project. We were unaware of the situation upon arriving at the school, but it soon became evident that we were not going to be unobtrusively observing a normal Green Action Eco-mobil visit.

I had made various visits to schools prior to this, and each time it had been arranged in advance. The Eco-mobil was able to drive straight in and park in a pre-arranged position, and the classes rushed out to it with much excitement. For this particular visit, the Eco-mobil was parked outside the school gates, and Mas Rehan invited my colleague and me to enter first with him, leaving the Eco-mobil driver and another Green Action colleague to wait. We went to the office where we sat and waited to meet the principal. The male principal and female vice-principal greeted us and enquired about why we were there. To our surprise, Mas Rehan started explaining about my PhD research, making it the focus of the visit. He told the principal that we were there to collect data on environmental education and could we please meet with the environmental cadets, to which the principal replied that if we were there to collect data, then we needed permission. I told the principal that I had research permission and showed him my official paperwork, which he showed the vice-principal and asked if he could keep. I said yes, but asked them to take a photocopy of it as that was the last copy I had on me (and was not sure if Green Action was planning on going to any other schools that day). We all made small talk while the vice-principal went to make a photocopy. At this point my colleague and I were still rather
confused as to why we were there and what exactly we would be observing. As the mood seemed to have lightened, Mas Rehan asked permission to bring the *Eco-mobil* onto the school grounds. The principal agreed and asked which students we needed to talk to. Rehan asked to talk to the student leaders (OSIS) and Emilia, a student who had been involved with Green Action when in junior high school.

Mas Rehan’s usual jovial and familiar manner that he used with environmental students was absent. Instead he took a sombre approach. He waited silently while the 21 OSIS students plus Emilia gathered in front of him. They sat in a semi-circle in the shade while he stood in the sun with a microphone in his hand and the back of the *Eco-mobil* behind him with the back door open, showing the large TV screen and audio system. He started by asking the students about their predictions for the future. I was expecting some kind of introduction or explanation as to why we had pulled them out of class, but there was none of that. The students replied that the situation will get worse, get hotter, and there will be less water. Mas Rehan informed the students that he would show them a video made by a child that predicts the future of the environment. The video was alarmist and doomsday-like. There were images and an artist’s impressions of drought and suffering with plastic trees and close-up shots of sick and distressed-looking people. There was some text on the screen, but no speaking, just emotive music which was very effectively broadcast through Green Action’s audio system. One of the messages that moved across the screen stated that men and women’s reproductive organs will be altered. The video ended to the song ‘When the Children Cry’ by White Lion. Mas Rehan knelt down in front of the silent students and told them, ‘That is only a prediction’. He then asked the students if they were doing enough for the environment. They answered no, not yet (*belum*). He told the students, ‘We won’t tell you what to do, but we will help you, as friends’. He told them, ‘We can help you, but it’s up to you. We can come back and come back, but in-between it’s up to you’. The students seemed uncomfortable, mostly looking down silently but clearly listening and thinking about what Mas Rehan was saying. Mas Rehan went on to talk about water cups and plastic before stating that he, my UWA colleague and I were available to help them. This was simply untrue. I was leaving Surabaya that evening and my colleague (a researcher with no environmental background) was only going to be in Surabaya for a couple more weeks. He showed the students how to set up *takakura* (a form of composting) before having them draw up a brief action plan. He pushed them for dates as to when they would have things in place. He told them that their principal was good, easy to lobby (*enak, gampang dilobby*). Having burdened the students with the bleakest of predictions for the future, Mas

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112 There was nothing about this film to suggest a child was involved in its production. It was a very polished, adult-like video.
Rehan took the mobile phone number of the leader of the group, promised to be in touch, packed up and left.

I felt completely uncomfortable with the situation, as I felt that I was complicit in this emotional blackmail of the students. Mas Rehan explained to me later that he had to focus on the students, as the teachers were not particularly interested in the program. I emailed Emelia twice in the following months to see how the group was progressing, but there was no positive news. She told me that she was frustrated by the lack of action. I asked Mas Rehan to return to this school with me a few months later to find out how they had been progressing and to speak to the students about their experiences in trying to introduce the program to the school. Mas Rehan told me that Mas Rudi had said no, Green Action would not take me back there as the school (students) had not done enough to deserve a visit.

The approach taken by Green Action with this school had none of the characteristics of EE or ESD that are promoted in the Global North. There were no partnerships, critical thinking, envisioning, systemic thinking or joint decision making. The approach was alarmist and burdensome, with false promises of support. Unsurprisingly, it was unsuccessful. There are many factors that influence one’s engagement or non-engagement in environmental learning and environmental action, and Green Action failed to understand and address this complexity (for reasons explored in the following chapter). Some of the main factors that were not addressed by Green Action (and discussed at more length in the following chapter) were enabling the students to choose how and when to engage, which can be as much due to issues of emotions, values, facilities and peer influence as to challenges of knowledge and understanding (Nagel, 2005; Prabawa-Sear & Baudains, 2011; Rickinson & Lundholm, 2010; Watts & Alsop, 1997); and the need to develop the capacity for appropriate and effective action in students (developing reflective, relational and transformative agency) (Stevenson & Stirling, 2010). There is a significant body of literature that examines the difficulties associated with addressing these factors in North American, Western European and Australian contexts, but there is very little literature available that examines these EE issues outside of these contexts.

**Paksarela (forced volunteering)**

Mas Rudi, government officials, teachers and principals all mentioned at various times that Surabaya employed a technique of *paksarela (paksa sukarela)*, forced volunteering. Mas Rudi explained to me that the idea was that if you make someone do something over and over, it becomes routine and then a natural behaviour for them. In Bourdieu’s terms, they were inculcating habitus through familiarisation. The government officials with whom I spoke also agreed that this forced volunteering
approach would lead to a realisation (penyadaran/sadar) of the importance and value of environmental actions that would translate into long-term behaviour change. Until such time as the people of Surabaya achieved this ‘realisation’, the Surabayan government would utilise this approach of paksarela. This approach, which has been written about in other settings, is referred to as environmentality. Environmentality is the term used ‘to denote a framework of understanding in which technologies of self and power are involved in the creation of new subjects concerned about the environment’ (Agrawal, 2005:166); to refer to the ‘creation of environmental subjects along with the emergence of the ‘environment’ as a domain that requires regulation and protection’ (Bauer, 2005:116) and as a ‘form of governmentality that constructs concern for the environment’ (Acciaioli, 2008:425).

Behaviour change research suggests that this approach (environmentality) may not engender long-term behaviour change once the gaze of the state is shifted. It has been shown that one’s beliefs about a behaviour are most likely to influence one’s intentions to engage in that particular behaviour (Ajzen, 1988; Ajzen & Fishbein, 1977). Therefore, the paksarela or environmentality approach would need to alter one’s beliefs as well as one’s actions if it were to achieve a ‘realisation’ of the importance of environmental behaviours. If it failed to achieve this, it would appear that the need for paksarela would never end. It is also important to note that environmental behaviours cannot all be lumped into one category. Factors influencing one’s engagement in an environmental behaviour are specific to that behaviour alone. For example, factors that influence an individual to separate waste to recycle, will be different to those that influence one to also actively conserve water or compost organic waste. Further, engagement in one particular behaviour does not guarantee the others (McKenzie-Mohr, Nemiroff, Beers, & Desmarais, 1995; McKenzie-Mohr & Smith, 1999; Prabawa-Sear & Baudains, 2011). Botero, Fediuk, and Sies (2013) argue that in the context of volunteering, individuals will be likely to have future intentions to volunteer only when they feel that volunteering is a positive behaviour; requiring individuals to volunteer may have negative effects. Requiring students to volunteer can lead to a negative change in attitudes toward volunteering. Contrary to the theory put forward by Mas Rudi and the government officials, Botero et al. (2013:313) suggest that ‘through forcing individuals to engage in volunteerism, the dedication, willingness, even appreciation for service-related behaviour may not be developed, and long-term volunteerism may be negatively impacted as a result’. In her study of mandated service in high schools in Maryland, USA, Helms (2013:308) found that the volunteer mandate did not have the intended effect of promoting lifelong volunteers. Students early in their secondary school years exhibited higher levels of volunteering, but after the mandate was introduced, volunteering levels of twelfth-grade students dropped, leading her to conclude that one
of the major goals of the program (to inspire a lifetime of service) did not extend through the final years of high school.

At all of the schools that I visited, the year 12 students where prohibited from joining the environmental program. This was despite the Surabaya Eco Schools program aiming to inspire long-term commitment to the environment. Time and time again I was told that the year 12 students had to focus on their exams, even in cases where students wanted to continue to be involved in the program. It was accepted as a general rule by teachers and principals that students had to focus on academic achievement in year 12 (with the assumption that students were not capable of doing both). This banning of year 12 participation (which was also the case in Yogyakarta) gave a very strong message that environmental actions are not educationally valuable and that one can pick and choose when one is environmentally responsible. This situation seemed to be linked to the idea that the lower class should clean up their neighbourhoods first and sellers at the traditional market should be targeted to compost waste, while multinational companies and the most elite in society seemed to be beyond environmental responsibility.

Indonesia has a long-standing tradition of *kerja bakti* (volunteer service/working together), *koperasi* (co-operatives) and *gotong royong* (mutual assistance) for the betterment of the community and nation (Bowen, 1986). Traditions of mutual cooperation were influenced by Dutch colonial notions of forced labour and these traditions have been adapted in recent political circumstances (Bowen, 1986). In the New Order period the term *gotong royong* often accompanied top-down development programs with ‘coerced’ participation (Bowen, 1986). All schools and most government offices still have at least one hour a week allocated to *kerja bakti*, where students and employees are expected to clean the premises and gardens. Many neighbourhoods (mine included) still hold *kerja bakti* sessions, when the men come together to cut weeds, paint monuments and walls, and remove dumped rubbish. The idea of working together as unpaid labour is something that is very normal and accepted as an important part of community life, and it seems that the *paksarela* approach to EE in Surabaya is a natural extension of this. The head of the Office of Sanitation and Parks pointed out to me that the people of Surabaya have a high level of public participation (in the environmental programs) and a high level of public awareness. He told me, ‘They are not playing around. They want to improve their neighbourhoods, they want to straighten out the rubbish situation, they want to run large-scale activities, and schools are the same. They want everything clean too.’ A teacher from a school in a lower socio-economic area in the far north of the city explained how the school relied on the direction of Green Action to progress its EE program. The school received instruction from one
week to the next, which helped it to transform part of their school grounds from a rubbish dumping site to a vegetable garden. This teacher suggested that this guidance was a very important part of the program and made particular mention of the importance of having young mentors from Green Action such as Mas Rehan with whom the students felt comfortable and quickly developed a close relationship.

Over the course of my fieldwork I had many conversations with educators and students who suggested that they were comfortable with and appreciative of the paksarela approach. The female principal at Surabaya’s most favorit junior high school recalled how, when she was principal of another school in an industrial area, the Mayor, Bu Risma, came to the school and told the principal that her school must become an environmental school. In recounting the story, the principal showed no signs of resentment and in fact spoke in an admiring fashion about Bu Risma, who saw an issue and acted on it. The principal was very proud of the excellent progress that the school had made, both on the school grounds and with the wider community. While some teachers seemed apathetic and reluctant to be involved in the environmental programs at their schools, I believe this was as a result of seeing themselves as a government employee rather than an educator and a reluctance to take on any additional workload or responsibility. Because my interviews and focus groups were conducted with teachers and students who were involved in the program, I had limited access to views of those who were not willing participants (such as students who threw rubbish at their cadet classmates or teachers who complained about the high cost of environmental projects or refused to turn lights off). The students, however, seemed completely content to follow the tasks set out for them by Green Action. This is not particularly surprising, as Javanese children are taught from birth to do as they are told and to accept the situation for what it is (nrimo) both inside and outside of the classroom (H. Geertz, 1959).

**Conclusion**

This chapter has presented in detail the relationship and processes used by Green Action and the Surabayan Government in their efforts to transform Surabaya into a clean and green city. The dominant approach to EE in Surabaya has been to implement an unwritten policy of forced participation in the Surabaya Eco Schools Program. The possible negative effects of forced volunteerism that have been identified in research from the Global North were presented and considered in light of the data and the Javanese context. The Surabaya Eco Schools Program includes numerous competitions and offers of rewards and prizes. This chapter presented details of this competitive approach to EE and the benefits and shortcomings of such an approach.
The Surabayan government and Green Action’s approach of placing the responsibility for behaviour change on those with the least voice and power in society (children and the urban poor) was discussed and found to be problematic, both in regard to internationally promoted principles and characteristics of ESD and Javanese societal expectations around the position of children and the importance of respect for elders and those of higher social standing. These two very different ideas about the role and position of children not only do not fit, but clash when brought together. This clash was voiced by Fajar and other students who felt that adults and their peers did not listen to them or support their environmental actions. Unlike the students, the teachers, Green Action staff and government officials all reported that the approaches taken were working well.

Despite the focus on processes rather than outcomes in this chapter, there were some very obvious positive environmental and social outcomes that resulted from Green Action’s programs and these were acknowledged. Surabaya and Surabayan schools are an example to other cities across Indonesia in the way that they have brought about positive environmental change and continue to do so. Many of the issues around a lack of critical thinking and lack of understanding of the inter-connectedness of environmental issues and human behaviour are not issues specific to EE, but are issues related to the wider education system in Indonesia: the curriculum and text-books; commonly used pedagogies; insufficient training of teachers and a focus on examination results. How these shortcomings may be addressed is explored in the following chapter.
Chapter 7: Leadership and a different type of EE

Introduction

This chapter considers in more depth the themes that arose in the Yogyakarta and Surabaya studies and applies Bourdieusian theory to explore them. Bourdieu’s theory of habitus, social, symbolic and cultural capital and symbolic violence are used throughout the chapter to interrogate the intersection of culture and power in EE, as seen in the operations of government departments, schools and ENGOs. The chapter explores the structure, definition and expectations of Indonesian EE within the broader education system and prevailing education culture and Javanese culture. It describes how UNESCO (global) approaches are filtered through the context of Indonesian education culture and leadership in the two cities and how this has resulted in an EE practice that barely resembles the original approaches to ESD promoted by UNESCO. In doing so, the chapter provides comment on how culture impacts on the definitions and practice of EE. After examining these points, this chapter draws conclusions on how the two cities came to have such different levels of engagement with EE, highlighting some missed opportunities and potential for ENGOs in the field, and finally, offers a culturally appropriate model for Indonesian EE.

The structure of formal EE in Indonesia

As the previous chapters have demonstrated, EE is a very diverse field. Structurally, there are many levels of government and organisations involved in its development and practice (or lack thereof). I argue that EE in Indonesia is still structured in a top-down manner that does not necessarily serve the needs of the diverse communities of Indonesia (and most likely of other Global South contexts). While this structure applies in a general sense to Yogyakartan and Surabayan formal EE (i.e. in schools), there are many examples of individuals and NGOs working outside of this structure to bring about positive environmental change whose work should be acknowledged (Nilan, 2015; Nilan and Wibawanto, 2015).

The structure of EE in Indonesia and the flow of influence vary between the two cities in this study. The structure of EE in Surabaya is atypical, and it is Yogyakarta’s structure that is largely found elsewhere. Typically (in Yogyakarta and other places) UNESCO can be placed at the top of the EE structure, as it was the motivating force behind Indonesia developing a national EE program. By appearing to align with UNESCO goals, NGOs are more likely to secure funding for projects, driving motivation for alignment. In the Surabaya structure, the influence of UNESCO is present, but less. This
is because the Mayor has taken the leading role in Surabayan EE and is by far the biggest influencing factor. One of the main differences between the structures of EE in the two cities is the role of the Office of Education. At the national level, the MOEC sets the curriculum, which includes very little environmental content. The Education Office is not involved at the provincial level in the typical structure of EE. It does not have an active role in EE; it does not provide professional learning for teachers on EE; and can prevent access for NGOs and other government departments trying to introduce EE into schools. This is very problematic, as it is the office that oversees all non-religious schools. These schools cannot engage with outside organisations (government or other) without the permission and support of the Education Office. As seen in the Yogyakarta study, by not supporting the Environmental Agency and NGOs which want to engage with schools, the Office of Education, Youth and Sport is effectively blocking external providers of EE from schools. In Surabaya, however, the Education Office supports EE (as a result of the Mayor’s directive), and there is cooperation between it and other government offices and Green Action. Schools are encouraged by the Education Office in Surabaya to work with Green Action and various government offices as a part of their EE programs. There is also a two-way flow of influence between Green Action and the Mayor, which is a significant factor in Surabaya’s successful engagement of schools in EE.

**Who defines EE/ESD in Indonesia?**

Environmental education is a continually evolving practice. Since the 1970s we have seen numerous changes in language and approaches. It has no clear, stable definition or model, but instead evolves with the expectations of the international community in response to ever increasing global trends of environmental degradation and disaster. UNESCO is largely acknowledged as the leading agency in shaping the direction of EE globally through the Tbilisi Declaration of 1978 (resulting from the 1977 UNESCO-UNEP Intergovernmental Conference on Environmental Education), Agenda 21 (the global action plan from the United Nations Conference on Environment and Development (1992)), the UNESCO Decade for ESD (2005-2014), The Bonn Declaration of 2009 and various other charters, publications and programs. N. Gough (2003:55) argues that since its inception (in 1974), the UNESCO-UNEP International Environmental Education Program (IEEP) has cultivated a neo-colonialist discourse in EE by systematically privileging Western (especially US) interests and perspectives. Sauvé et al. (2007) conducted a hermeneutic critique of three decades of international guidelines for

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113 The Ministry of Education and Culture (MOEC) is the title at the national level. It is known as the Office of Education, Youth and Sport (Dinas Pendidikan, Pemuda dan Olahraga) at the provincial level for Yogyakarta (DIY) and the Education Office (Dinas Pendidikan) in Surabaya.

114 See A. Gough (2013) for a ‘history’ of the field.
environment-related education. One of their findings was centred around the promotion of ‘Western’
culture. They found that with the UN’s proposals comes a promotion of ‘the sociocultural mega trends
which characterize our contemporary Western civilization’ (Sauvé et al., 2007:36).

In the wake of the World Commission on Environment and Development (1987), the UN urged all
countries in the world, to develop SD policies and strategies (Berryman & Sauvé, 2016). In response
to the pressure from UNESCO, Indonesia established an Implementation Strategy for the UN Decade
of Education for Sustainable Development (DESD) and an Education for Sustainable Development
Committee to facilitate the DESD implementation strategy which led to the development of the
Adiwiyata program for schools in Indonesia in 2006 (UNESCO, 2011). The Adiwiyata Program was not
positioned within the MOEC, where it would have access to curriculum developers, policy makers and
easy access to schools and teachers. Instead, it was positioned within the (now) Ministry of
Environment and Forests, which has limited access to schools, teachers and people of influence within
the Education Office. I suggest that as long as EE is positioned outside of the Ministry of Education and
Culture and its departments, it will struggle with issues of legitimacy and access to schools. This is
discussed later in the chapter.

Despite being developed to meet the expectations of UNESCO around the DESD, the Adiwiyata
Program has few of the characteristics of ESD as defined by UNESCO. The main characteristics of the
latter include: envisioning, critical thinking and reflection, systemic thinking, partnerships and
participation in decision making (UNESCO, n.d.-a). UNESCO does not explicitly mention the
environment or environmental learning in its characteristics of ESD. This is because ESD is not the
same as EE and it does not preference environmental concerns over social or economic concerns
(Jickling, 1992; Jickling & Wals, 2008). Sustainable development, as a concept, does not necessarily
align itself with conservation or action for the environment. The very concept of sustainable
development is fraught with ambiguity and depends largely on cultural values for interpretation
(Sachs, 1999). Many scholars argue that there is no such thing as sustainable development; it is an
oxymoron and the idea of continual development on an earth with finite resources is indeed foolish
(Reid, 1995; Sachs, 1999; Spaiser, Ranganathan, Bali Swain, & Sumpter, 2016). In instances where ESD
is used instead of EE, it is relying on an assumption that learners have developed the aforementioned
skills and are therefore able to make well informed and considered decisions about their behaviour
(environmental, social and economic). This means that some may choose to act in self-interest over
environmental interest. Despite lacking UNESCO’s ESD characteristics, the Adiwiyata Program is
promoted on UNESCO’s websites as a UNESCO Green Citizens Program (UNESCO, n.d.-c). As discussed
later in the chapter, the term ESD is filtering down through the EE field in Indonesia and is being used interchangeably with EE, with little concern for any differences between the two and the challenges associated with implementing ESD approaches that align with local cultural expectations.

Berryman and Sauvé (2016) argue that the dominant culture of sustainable development interprets cultural diversity as a challenge or an obstacle, and invites all cultures to adapt and adopt a certain Western worldview. Thus, hegemony is exercised culturally through education (supported by the UNESCO ESD program) (Berryman & Sauvé, 2016:107). While I see their argument and largely agree with it, I consider the dominant culture of SD as more ‘cultural imperialism’ than ‘hegemony’ in the Javanese context. As discussed above, the use of *paksarela* by Green Action and the Surabayan government is an example of environmentality, for which diversity of any kind (cultural or other) is interpreted as a challenge or obstacle. It is evident in the examples of Yogyakarta and Surabaya, however, that while UNESCO is in a position to encourage governments to act and to develop policies and programs, the form that these policies take and the way that programs are implemented largely depend on local governments, school principals and ENGOs which are influenced significantly by their own educational experiences, local culture, and expectations of the education system. As discussed later in this chapter, in instances where funding is attached to ESD programs, the language is easily adapted to meet requirements, but methodologies and approaches are more difficult to change.

While the literature identifies UNESCO as the starting point for Indonesia’s ESD policies and programs, I was eager to confirm this with those involved in EE/ESD. I had the opportunity to attend a national workshop for the Environmental Education Network (*Jaringan Pendidikan Lingkungan*) over three days in October 2016. The workshop, entitled ‘Training workshop on Education for Sustainable Development: For education and community development facilitators’, was attended by 35 facilitators and educators from across Indonesia (Aceh, Medan, Jakarta, Bogor, Bandung, Semarang, Malang, Yogyakarta, Sulawesi, Bali, Kalimantan and Papua). All attendees were from NGOs, with the exception of two who were Aceh government employees. Many of the attendees admitted that they were previously unaware of the term ESD or of what it meant in practice. When I queried why the workshop was focusing on ESD rather than EE, I was informed that this phrase was increasingly a requirement if one wanted to receive funding for projects. Projects were required to demonstrate how they were using ESD in dealing with local issues. This situation supports the assertion of Sauvé et al. (2007) that international guidelines and recommendations are more important in the context of globalisation than ever before, particularly because of the need to legitimise initiatives and find strategic or financial support.
The Network’s Secretariat is comprised of EE professionals, all of whom have extensive experience in the field. The members of the Secretariat made up the bulk of the presenters and facilitators over the three days, with a few guest speakers from other NGOs. In the workshop’s terms of reference document, the aims were defined as: ‘to increase the capacity of the facilitators of education and community development in the field of the environment, regarding the role of ESD in achieving the sustainable development agenda, and the quality of educational services, through education and learning practices implemented by JPL member organisations and institutions’ (Sekretariat Jaringan Pendidikan Lingkungan [Environmental Educators' Network Secretariat], 2016) (my translation).

The three days consisted of seminars and group sessions in which participants were challenged to apply their (often new) understanding of ESD to their current projects and work. The participants were enthusiastic, supportive, interested to learn and happy to share experiences. One attendee raised the issue of whether ESD was just another name for what is already occurring, or whether we need to start again in our practice. The general agreement was to continue as usual, but to be sure to use the term ESD (pendidikan untuk pembangunan berkelanjutan) in formal reporting. While the bulk of the three days focused on Agenda 21, the Decade for ESD, defining ESD and how to apply ESD to our practice, the final session considered issues that members’ organisations might have going forward. The most common answers included: it was very difficult to find suitable staff; the training they required was significant; and it was difficult to convince management (for those in bigger NGOs) and sponsors of the value of a ‘quality over quantity’ approach.

**Power and leadership in the two cities**

Education cannot do the job of politics. The highly idealistic notion - which assumes that we just need to change the way we educate our kids and students in order to make sustainability fall into our lap – is both horribly naive and utterly unfair on the younger generation (Jucker, 2002:9).

While the Yogyakarta and Surabaya chapters appear to give a very different account of EE in the two cities, I argue that they are very similar approaches in that both are directive and prescriptive, and it is differences in leadership that have resulted in variation in outcomes. Differences in leadership are evident in the ENGOs and in the actions (or lack thereof) of the mayors in the two cities. I will present
the political situation in Yogyakarta to highlight how, with the current political situation, it is unlikely that Yogyakarta will match the environmental achievements of Surabaya in the near future.

Yogyakarta’s political situation

Yogyakarta has long been considered the cultural heartland of Java. It enjoys a special status (*Daerah Istimewa Yogyakarta*) in recognition of the role of Sri Sultan Hamengku Buwono IX and the Yogyakartan people in the independence struggle and Yogyakarta’s role as the capital during the National Revolution. Hamengku Buwono IX, who is known as one of Indonesia’s founding fathers, was a highly respected and much loved leader of Yogyakarta from 1940 until his death in 1988. Hamengku Buwono IX held ‘power’ in both the Javanese sense (as a fatherly leader with spiritual abilities and connections) and the Western sense (in economic and political senses) in and beyond Yogyakarta and was seen to care for the little people (*rakyat/ wong cilik*). His son, Hamengku Buwono X, became Sultan of Yogyakarta after his father’s death and was the democratically elected Governor of Yogyakarta before the law was changed in 2012 to make the Governor of Yogyakarta an inherited position held by the Sultan. During his first decade as Sultan, Hamengku Buwono X maintained a relatively low profile, focusing on cultural and ritual performances and distancing himself from national politics. This changed in 1998 when he joined calls for Suharto’s downfall and was credited with maintaining peace and civility in Yogyakarta, while Jakarta, Surakarta and other cities across Indonesia saw riots, looting and rape directed at Chinese families (Woodward, 2011). Woodward (2011:251) suggests that in his earlier decades, Hamengku Buwono X ‘continued his father’s policy of serving as an advocate for the poor, and was critical of development projects that did not benefit the communities in which they are located’.

Hamengku Buwono X is a very powerful figure politically and economically in Central Java. He owns and controls vast amounts of land in the Yogyakarta region, some of which is considered the Sultan’s land, as well as other areas of land that are contested (Colbron, 2016). In addition to his land assets, he and his family have many business interests. The details of his land and business interests are not publicly available. In recent years he has been seen to favour concern for his business interests and those of his family over concerns for the ‘people’ (*wong cilik*), resulting in many land disputes as Yogyakarta has focused on tourism and development (Biennale Jogja XIII Equator #3, 2015; Suryani, 2016; Wicaksono, 2016; Yanuardy, 2012). This focus on tourism and development does not sit well with the conservation messages of EE. The current Mayor, Hariyadi Suyuti, and Sri Sultan Hamengku Buwono X have shown no desire to embrace any kind of sustainable development or eco-tourism, despite the growing discontent of the Yogyakartan people. The Javanese phrase *Jogja ora didol* (*Jogja
is not for sale) can be found all around Yogyakarta – on banners, street art, and t-shirts, as well as a hashtag on social media posts. It is also common to see banners strung up at the entrance to neighbourhoods stating that ‘this neighbourhood (kampung) rejects hotels and apartments’.

Figure 7.1 Twitter post 2013. Jogja’s not for sale
Caption reads: Here’s another upload of this photo ‘Jogja’s not for sale’. The artist has been criminalised by the Yogya authorities. Keep barking, dogs.
Source: Twitter @masbutet.

Figure 7.2 Artwork protesting Jogja’s hotel developments
Street art depicting Yogyakarta’s famous Tugu monument and Mt Merapi volcano with the words Jogja’s Special – Its Hotels (referring to its special status and the hip-hop song Jogja Istimewa)
Source: Twitter. Photo by @jo_rizki
The development of the Uttara apartments is one example of a highly contested development in Yogyakarta. Local residents have maintained street protests at all stages of its development, citing concerns that it will increase traffic, draw large amounts of groundwater and disrupt the current way of life. The apartments are nearing completion despite these concerns and on-going protests.

Figure 7.3 The highly contested Uttara building
Source: [http://www.apartemenuttara.net/2016_03_01_archive.html](http://www.apartemenuttara.net/2016_03_01_archive.html)

Figure 7.4 Protesters outside the Uttara site
Signs read “Reject apartments”
In writing about green governmentality and the historical contingency and entrenchment in the social, political, economic, cultural and non-human contexts which produce it, Rutherford (2007:294) suggests that ‘power bleeds across the social body in such a way that governing occurs in multiple sites and through a myriad of techniques’. This is indeed the case in Yogyakarta where the power of the Sultan goes far beyond his position as Sultan and Governor. Like Surabaya, Yogyakarta has a democratically elected Mayor, Drs H. Hariyadi Suyuti. Unlike Surabaya, Yogyakarta’s Mayor is in the difficult position of being Mayor of the city that is spiritually led and officially governed by Sri Sultan.
While the previous Mayor (Herry Zudianto, Mayor 2001-2011) implemented a minor greening and street-scaping program, this approach did not have enough political support to continue beyond his tenure. The current Mayor, with the Sultan, has pushed for Yogyakarta to move towards unbridled development and tourism. The Sultan’s many business interests strongly impact the ability of the Mayor to implement pro-environmental policies; he cannot introduce any policies that would interfere with the Sultan, his family or his alliances’ business interests. If the Governorship were a democratically elected position, there would be a chance for the Mayor and Governor to work together and represent the people on issues related to the Sultan, but, as it stands, the Mayor has little choice but to support the Sultan in issues such as the broad-scale disputes over land that is being reclaimed by the Sultan (Muryanto, 2015). In response to a lack of action by the Mayor, local activities and collectives started an urban movement entitled ‘Looking for Hariyadi Festival’, in reference to Mayor Hariyadi’s overseas travel and consequent absence from everyday governance. This movement included the Jogja ora didol (Jogja’s not for sale) slogan that is seen in Figure 7.1.115

Yogyakarta is still lacking the basic infrastructure, planning and zoning needed to sustain the city of 3.6 million people (Biro Tata Pemerintahan Setda DIY [Bureau of Governance for the Regional Secretariat of DIY], 2016). There is no city-wide sewage system, piped water or waste management. All of the new hotels, in addition to the thousands of households and boarding houses, draw water from wells, depleting ground water; effluent waste is discharged into septic tanks or waterways; commercial waste is largely unmanaged – usually burnt or piped to the nearest waterway; and household waste is burnt, dumped, or paid for privately to be disposed at the nearest tipping site. With little city planning and no zoned areas, industrial, commercial and residential buildings and activities occur alongside each other.116 I argue that even with a strong EE program, Yogyakarta would continue to suffer environmentally, as its people are largely denied the opportunity to ‘go green’. There is no infrastructure to support such measures. Introducing such infrastructure would not only be expensive, but would also in some ways acknowledge that until now, Yogyakarta has suffered a lack of infrastructure (Firman, 2010). It would, however, be a positive move by the Sultan, who, it seems, has done little for the little people in the past decade. Instead, there has been an unrelenting focus on privately owned developments with no supporting public infrastructure.


116 For example, my house is situated on an unsealed road next to a rice-field on one side, a house on the other, with a factory directly across the road.
As outlined in Chapter Five, Yogyakarta is home to various ENGOs. While there are many grassroots organisations and inspiring individuals trying to bring about positive environmental change, I argue that leadership (in varying forms) plays a significant role in enabling significant and large-scale environmental change. This is true for most societies and particularly so in Javanese society.

Where’s the leader?

The importance of leadership in education is well documented, and in recent years there have been various high quality publications concerning education and leadership in the Indonesian context (Dzuhayatin & Edwards, 2010; Hariri, Monypenny, & Prideaux, 2016; Parker & Raihani, 2011; Raihani, 2008). The role of leadership in EE is also well documented in Gallagher (2012), but literature that explores issues of leadership and EE in Asian contexts is quite scarce. Mino and Hanaki (2013) published research on Japanese efforts to develop environmental leadership capacities in Japan, Cambodia and Thailand, but fell short of examining the social and cultural influences (which differ from one place to another and vary greatly even within national boundaries). While they acknowledged that many people in Cambodia are still suffering the effects of Pol Pot and the Khmer Rouge, they did not examine the impact this had had on an individual’s willingness to become a leader or the community’s willingness to accept leaders – environmental or otherwise. The silence around the differing role of leadership and need for different approaches to EE in diverse contexts has led to the promotion of generic approaches that do not provide space for strong leadership. I argue that in places such as Indonesia, the desire to have a leader to make the tough decisions on behalf of the community (and therefore avoid conflict and maintain social harmony) often outweighs the community’s desire to take action of its own accord (Koentjaraningrat, 1988 [1969]; Magnis-Suseno, 1997; Shiraishi, 1997). Attempts to apply international, generic approaches to ESD/EE should, at the very least, take into account cultural influences and local beliefs.

In the case of Indonesia, considerations such as leadership, religious beliefs, gender roles, hierarchies of power and broader education traditions are just as important as the curriculum. The current approaches backed by UNESCO result from a Eurocentric neo-colonial approach that assumes that the approaches introduced by colonial powers across the globe are more effective or better than any local or indigenous approaches. N. Gough (2003) draws on the work of Harding (1993) to highlight the argument that the Eurocentrism and androcentrism of many scientists, policymakers and other highly educated citizens severely limit public understanding of science as a fully social process. Not only is this situation neo-colonial and dismissive of local knowledge and traditions, but it misses opportunities for authentic engagement and long-term positive change. My research suggests that similar
limitations occur in EE in Indonesia. To date there has been no examination or consideration of the place of culture and traditions in Indonesian EE. We see EE developing as directed from the Global North (as a result of the DESD) with the implied understanding that Global North approaches and pedagogies (often referred to as global or international approaches) are universal and should be universally disseminated. The difference is that Indonesia is at the very early stages of developing EE/ESD, and due to the considerations listed above (leadership, religious beliefs, gender roles, hierarchies of power and broader education traditions), the neo-colonial imposition of contemporary understandings of EE has not been fully realised.

It is easy for scholars from the Global North to assume that the barriers and influences to EE are universal, and they are at times presented as such (Ballantyne et al., 2006; Ballantyne et al., 2001; Eilam & Trop, 2014), but my experience in Indonesia demonstrates that they are not. Leadership is one example. Indonesia relied on strong leaders in its fight for independence and became accustomed to an authoritarian regime in the 30 years of Suharto’s rule. Today, there is a growing leadership by Islamic groups in Java which some see as ‘filling the gap’ in political leadership. Leadership opportunities to influence a green agenda are therefore significant, as seen in Surabaya. In instances where environmental leadership is lacking (as in Yogyakarta), the community is unlikely to take up the agenda, even when the environment is polluted and difficult to live in. When living in Indonesia, it is sometimes difficult to comprehend how people have come to accept such a polluted environment and have chosen to accept the situation, rather than to address the problem or speak up about it. Guinness (1999:94) found that Yogyakartans appeared unwilling to commit themselves too publicly to an opinion. This, he suggested, was not only because it might be seen as being dangerously critical of government (towards the end of the Suharto era) but because it might also raise dissension among neighbours. In many of Indonesia’s most polluted areas, the pollution is caused by local people, local businesses or big companies that employ local people. Avoiding upset amongst members of the community seems to be a bigger motivator for inaction than environmental problems are for action. In places such as Surabaya, where there is strong pro-environment leadership, some parts of the community are able to take action without having the worry of upsetting their neighbours.

In his more recent book, Guinness (2009) outlines the work of Romo Mangun, a Catholic priest who openly criticised local government and led local activists against city plans to demolish houses on a riverbank in Yogyakarta in 1983. He reports that the activist groups were quiet in the decade following Romo Mangun’s departure, but increased their activities in 1999 (post-Suharto). This is not necessarily the case in wealthy housing estates.
Pak Hendra, an English teacher at The Madrasah in Yogyakarta, explained the Javanese need for a leader as follows:

The school needs support from the government. If there is no government support, the school is not motivated. For example, they [Environmental Agency] need a specific plan for Adiwiyata. A five-year plan. [They] must have 10 or more schools and offer them support. It needs to come from the Mayor, then delegate to the City level government, Environmental Agency etc. The policy must come from the Mayor. He has the authority and power to make policies. If he doesn’t have the policies, staff just wait. It’s the character of the Jogja people to follow the leader, so initiatives must come from the Mayor. The former Mayor had more concern for the environment and good planning – how to make Jogja’s [natural] environment better. For example, gardens on the street [street scaping] and some parks. He showed that he had a program to make the environment better, then the people give support. [That’s the] character of Jogja – support and follow the leader. Do what the leader says. I saw a big difference between the former Mayor and the past ones.

(Pak Hendra, English teacher, interview 21 February 2015)

Pak Hendra believes that the 30 years under Suharto’s rule resulted in people having come to rely on the government. He finished by telling me that people ‘are not used to thinking for themselves or taking action. [It] will take a long time to fix this. Adiwiyata depends on [the] Principal. If [the] Principal has [a] good program, others will follow. Strong leadership’.

In his writings on power and authority in Javanese society, Anderson (1990:36) explained the importance of the leader, the ruler, in Javanese society. He argued that the core of the traditional polity has always been the ruler, who personified the unity of society. This unity is in itself a central symbol of Javanese power, and it is this fact as much as the overt goals of statist ideologies that helps to account for the obsessive concern with oneness that suffuses the political thinking of many contemporary Javanese.119

It is important to note that Anderson’s work is not uncontested – for instance, it is ‘gender blind’. While leadership and power are strong traditions amongst the Javanese, other parts of Indonesia have different traditions, some of which are more achievement-oriented and egalitarian (Minangkabau and Bugis, for example).

119
Bourchier (2014) and Parker (2003) provide insights into how the New Order, largely through its Pancasila indoctrination programs, developed the ideology of Indonesia as a family state.\textsuperscript{120} Parker (2003:9) describes the way the state invoked a patriarchal nuclear family as an ideal for an authoritarian state:

a \textit{bapak}, or father-figure, rules the state as his own family. He knows the needs of his “children”, and through his love for his “family”, rules in their best interest. There is unity of power and authority, the primacy of “family” needs over individual needs, and no possibility of legitimate opposition. This is said to suit the Indonesian national character.

In his epilogue, Bourchier (2014:254) refers to a ‘general trend to look to the Soeharto years for solutions to Indonesia’s problems’ and refers to A. Chaedar Alwasilah’s (1998) claim that through the P4 (Pancasila program) Indonesian people had systematically been made uncritical, cowardly, and dependent.\textsuperscript{121} These comments are very critical. While I do not completely accept Alwasilah’s claims, they highlight the way Pancasila encouraged reliance on leadership. While these comments were not made in reference to the education system in particular, they echo Pak Hendra’s arguments that Javanese people look for and rely on strong leaders to bring about change. The public nostalgia for the certainties of the past may not be unique to Indonesia, but it is significant, even for the one third of Indonesia’s population who have no memories of the New Order regime (Bourchier, 2014). This desire for a strong centralised leadership and traditional Indonesian values, combined with a general rejection of ‘Western’ democracy and ideals, suggests that Indonesia’s education system, with its culture of obedient patriarchy and bureaucracy, may not want to embrace the UNESCO-style principles and characteristics of ESD for the same reasons that Indonesia is content with its own form of democracy (Bourchier, 2014). Bourchier (2014) explains that democracy in the 2004 curriculum was regarded as a positive value, but only when tempered by Indonesian cultural norms and national imperatives. Bourchier (2014:252) also notes that Citizenship Education in the 2004 curriculum:

- came in for increasing criticism for focusing too much on individual and group rights and too little on integrative factors such as Pancasila. Debate on the subject in subsequent years saw the ‘US-influenced’ curriculum blamed for a range of ills, from interschool violence and a fading of nationalism among young Indonesians to corruption and national disintegration.

\textsuperscript{120} Pancasila is the state ideology of Indonesia, articulated by Indonesia’s first President, Sukarno, in 1945. The five principles are: belief in one supreme God, a just and civilised humanitarianism, national unity, popular sovereignty guided by wisdom through consensual consultation and representation, and social justice.

\textsuperscript{121} These comments were made about Indonesians whereas Pak Hendra referred to the Javanese.
The lesson to be taken from the above is that Indonesia needs its own EE, an EE that meets the educational needs of the students and is acceptable in the context of Indonesian education and culture. I propose an approach to EE that could meet these needs at the end of this chapter.

While the role of and desire for strong leadership was evident in both Surabaya and Yogyakarta, the difference in priorities by the leaders of each city meant that outcomes were extremely different. The leadership of Bu Risma and the Surabayan government enabled broad-scale EE to be facilitated by Green Action. In Yogyakarta there was no visible leadership around the environment, and where Adiwiyata existed due to it being a national program, it was under-supported by the Environmental Agency (which refused to work with NGOs and limited school participation) and the Office of Education, Youth and Sport. Any EE attempts in Yogyakarta were largely undermined by the Yogyakarta government’s focus on development and lack of support for the program by the Environmental Agency and Office of Education, Youth and Sport. In short, leadership was the main factor contributing to these two Javanese cities having such diverse environmental outcomes.

Prior to beginning my fieldwork, I knew that it was important to develop a clear picture of what educators, NGOs and students considered EE to be and to understand that their definitions may vary. I was adamant that I did not want to consider the effectiveness of EE based on my own interpretations alone, but needed to be fair and to consider what it was that those involved in EE were aiming for. The main themes that emerged time and time again were clean and green, a desire for more hands-on activities (praktek) and an aversion to getting dirty (kotor) and dark (hitam).

**Clean and green**

The words ‘clean and green’ and their associated meanings are accepted as fitting together well in Indonesia. As part of the Adiwiyata program there are sections on clean toilets and healthy canteens. These two topics, in particular, would normally be associated with a health program in the Global North, rather than an environmental program, unless the focus was on environmentally-friendly cleaning products, water conservation or waste avoidance. Surabaya has been identifying as a green and clean city since the introduction of its greening program in 2006, and this image has grown as Surabaya’s commitment to being clean and green has increased under the leadership of Bu Risma.

Efforts to be clean and green in Surabaya focus firmly on making unity of experience – having high levels of participation in events and making participants feel that they are part of a bigger movement.
Indeed, the focus on being clean (bersih) has a long history across Indonesia (Taylor & Van Dijk, 2011). Being clean and neat (rapi) are often linked and are important in personal appearance and the presentation of the village. Javanese women sweep the front of their houses every morning, and many sweep the road or path in front of their house too. This is often repeated at dusk. In addition to keeping the kampung rapi and bersih, it provides opportunities for chatting with neighbours and watching children while they play outside. This ritual often involves sweeping the earth till it looks unnaturally neat and sweeping away any leaves or litter. In most instances the leaves and litter are burnt, leaving the kampung smoky in the early morning. These activities are focused on keeping the neighbourhood bersih (clean), rapi (neat), and indah (beautiful). The focus on cleanliness also relates to the body. Children are bathed meticulously every morning and late afternoon and covered in powder before being taken outside again to chat or play with neighbours. Children are often reminded that it is time for a mandi (bath) when playing with neighbours and ushered home for a bath before re-appearing to continue playing. As an adult, it is also quite common to be asked if you have already had a bath; if you look hot and tired when visiting someone’s home, it is also common to be encouraged to take a bath (mandi). In Java, the quest for cleanliness can also be linked to the Islamic requirements for cleaning oneself before prayer. Before prayer, one must wuduh, washing their feet, hands and face before entering the mosque or performing prayer at home. Many Javanese do this five times a day.

During the early stages of my field research I asked various teachers what they thought effective EE was. This question was always met with confusion. I usually rephrased the question to ask teachers how they knew if their EE program was working, if it was effective. Answers were almost always related to cleanliness and putting rubbish in the bins. Teachers made statements such as, ‘students throw rubbish in the bins, students help to keep the school clean, there isn’t much litter on the ground’. Other examples included, ‘This school had no garden before, and now we have trees’. On more than one occasion a teacher counted the number of trees that had been planted as a result of the EE program. Of all the teachers with whom I spoke over the course of 12 months, in both cities, only two spoke about affecting the way students felt and thought about the environment and their connection to it. In the Yogyakarta and Surabaya context (and in other parts of Indonesia), effective EE is quite simply being green and clean.

**Praktek**

During focus group discussions, I asked students what made effective EE. The most common response was praktek (practice or hands-on activity). Various students reported wanting less theory and more practice. This comment was made in a focus group discussion with environmental club students from
The Madrasah in Yogyakarta:

In my opinion, the most effective way is to go straight down – practice and not just theory. This whole time we have seen too much theory. All theory, but when is it time for practice?

(Akmal, focus group discussion at The Madrasah, 10 December 2014)

I support the students’ calls for more hands-on opportunities, but at the same time, I question the standard and applicability of the theory that they are taught. The same student explained to me that ‘if we know the theory, then we know to add some tetes tebu (drops from sugarcane) so that the micro-organisms will live again (hidup lagi) and that can be used to provoke microorganisms that are in the compost in a more useful way.’ Tetes tebu is used in a fermentation process in some instances, and I assume the student is referring to this. I found it quite concerning that he thought that it could bring dead microorganisms to life, but at the same time I was pleased that he understood something about composting (the existence of microorganisms). His example demonstrated that he needed both – more theory and more practice, not more of one and less of the other. I did not get the chance to ask if he understood the environmental benefits of composting.

This example was one of many where students who were active in the school’s environmental club or Adiwiyata program failed to understand quite straightforward concepts, such as the environmental benefits of composting, how waterways are connected in the neighbourhood (when talking about drainage and biopori), why their mushroom log was dry or how their environmental actions are related to climate change. Quite often they had learnt some kind of theory or scientific explanation, but failed to understand its relevance to them, their actions or to broader environmental issues. This suggests that not only do students need more practical opportunities in order to engage with nature (see Nature relatedness below), but also they need more in-depth learning that focuses on scientific explanations and provides opportunity for discussions that demonstrate the interconnectedness of environmental issues. This can only be achieved when teachers have the knowledge and skills to facilitate such learning. Understanding the interconnectedness of different environmental problems and the impact of humankind’s action on the environment is a fundamental first step to understanding environmental issues. It was clear from our discussions that even the most enthusiastic senior high school students lacked this understanding.

What is praktek?
While students made clear their desire for more hands-on learning (*praktek*), I needed to consider what this meant in different contexts. In his (2013) chapter ‘Teacher training, school norms and teacher effectiveness in Indonesia’, Bjork describes how 57 percent of teachers in his survey reported using ‘student-driven’ and ‘active’ approaches to teaching. Bjork had seen very little evidence of this in classroom observations. The teachers reported using workbooks in class, requiring students to complete more revision exercises and assigning homework more regularly as student-centred teaching techniques (Bjork, 2013:54). None of these examples fit Bjork’s definition of student-driven or active approaches to teaching. Similarly, my understanding of hands-on or *praktek* in regard to EE was quite different to that of the students and teachers. My understanding of hands-on learning in EE begins with students identifying an issue and working on a project to address that issue. Ideally, they would use competencies such as critical thinking, imagining future scenarios and making decisions in a collaborative way. There were few opportunities for me to observe classes that were *praktek*, but of the few that I did observe, it appeared that leaving the classroom was the defining feature of *praktek*.

Green Action’s approach with the Eco Schools program in Surabaya was almost exclusively focused on *praktek*. The ‘green hours’ part of the program focused solely on students and teachers undertaking hands-on activities. In order to be eligible for certain awards, students had to have completed a minimum amount of green hours. These hours could only be accumulated by participating in hands-on activities, such as composting, working in the greenhouse, collecting organic waste from the market, making or repairing *biopori* and tending to the school gardens. The Green Action EE approach was purposefully focused on *praktek*. As a result, students were competent at these activities, and in many cases the environmental outcomes were evident. As discussed elsewhere, the students were often lacking in their understanding of why these actions were important and how they were connected to environmental problems and solutions. They had mastered the *praktek*, but had little to no understanding of the theory. As discussed in Chapter Six, despite his best efforts with *paksarela* and green hours, Mas Rudi could not invoke an environmental habitus in students (or teachers). This can be attributed to the lack of homogeneity in experiences inside and outside of the school. Bourdieu (1977b:56-57) explains that ‘in order to fulfil its external function of cultural and social reproduction, an ES [education system] must produce a habitus conforming as closely as possible to the principles of the cultural arbitrary which it is mandated to reproduce’. Mas Rudi was attempting to produce an environmental habitus which did not exist in the broader society, and the broader society did not have the same incentives and rewards as the schools. Green hours was his tool to engage greater numbers in environmental actions, but even with green hours, these environmental actions were limited to the
school context and, therefore, were not achieving the desired outcome of developing behaviours in school that would transfer beyond the school grounds.

**Nature relatedness – getting dark and dirty**

One of the challenges for students involved in environmental programs in both Yogyakarta and Surabaya is having to get dirty (*kotor*). Getting dirty is inevitable in efforts to make the school green and clean and is most certainly unavoidable if one is to engage with nature. Getting dirty is arguably a necessary part of EE. In Indonesia, being dirty is often associated with poverty, or with lower-class work, such as being a rubbish- or recycling-picker, working in the rice-fields or labouring. Being dirty goes hand in hand with being dark-skinned (*hitam*) as a result of working outdoors. Being *hitam* is associated with being uneducated and poor and is therefore highly undesirable. No urban middle class Indonesian would normally want to be associated with either of these traits. I argue that this aversion to dirt and sun impacts on the amount of exposure that teachers and students in Yogyakarta have to the natural environment. I add that a reluctance to be seen as *kotor* or *hitam* also contributes to inaction by some teachers and students in EE. While this same aversion is evident in Surabaya, Green Action has made it a necessary part of its program to conduct outdoor activities; as a result of the green hours project, teachers and students are spending more time outside. However, these activities are still mostly limited to the school grounds, and students and teachers rarely venture outside of the school to learn in natural settings.

In Java, people who pick recyclables out of rubbish (*pemulung*) are often treated with suspicion and widely accused of wanting to steal more valuable items from houses. As a result of this suspicion, many housing estates and streets in middle to upper-class areas have signs forbidding pickers from entering (*Pemulung dilarang masuk*). Students involved in environmental programs are commonly accused of being dirty (*kotor*) by their peers. Students told me time and time again of how they had been called dirty (*kotor*), called pickers (*pemulung*), told they smelt (*bau*), and told what they were doing was disgusting (*jijik*). This was sometimes as a result of having been in contact with compost or recyclables, and other times by association (being part of the environmental club). The students reported staying calm and patient in such situations because they knew that they were doing important work. Other students responded that if they did not do this work, who would? Whilst

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122 See Tanu and Parker (2018) for exploration of how *kotor* became a kind of transgressive identity for some environmental cadets in Surabaya.

123 Often associated with doing higher, or more noble (*mulia*) work.
these students were willing to bear the derogatory labels, many would not, and I argue that this aspect of Indonesian culture impacts on how EE is (or is not) taught outside the classroom.

Louv (2005) writes about nature-deficient disorder in children. It can be described as the non-medically diagnosed effects of a lack of exposure to the natural environment. Among the effects, he suggests, are diminished use of the senses, attention difficulties, and higher rates of physical and emotional illnesses. Louv also notes the many positive effects that children experience when they are exposed to nature. He suggests that experience in nature can assist in treating depression, obesity, and attention-deficit disorder, as well as increasing a child’s (and an adult’s) powers of concentration and creativity. The aspects of Louv’s argument that are possibly the most relevant to Indonesia’s formal education system are that outdoors environment-based education can improve standardised test scores and assist in the development of problem solving, critical thinking, and decision-making skills. As identified in Chapter Three, the literature suggests that spending time in nature provides opportunity for connection to it, seeing oneself as part of it, and increasing the desire to protect it (Nisbet, Zelenski, & Murphy, 2009; Schultz, 2000).

Literature on nature-deficient disorder is based on research conducted in Global North contexts. While Yogyakartan and Surabayan students can be said to be nature-deficient, the question of context needs to be considered in more detail. How, for example, could the aversion to being kotor and the negative association with hitam and poverty be overcome to entice teachers and students beyond the school grounds and into nature? How effective would exposure to nature be in combatting persistent religious and educational discourse that portrays the environment as a resource provided by God, to be exploited for humankind’s benefit? What about the 47.7 percent of Indonesian students living outside of cities (Badan Pusat Statistik [Bureau of Statistics], 2015)? Do teachers and students in rural settings have a greater ecological identity and concern for the environment, or are they more likely to consider it a resource to be exploited?

Reward and faux prestige

In this ethnographic account of EE in Yogyakarta and Surabaya, Indonesia, there has so far been little focus on EE policy. This is, in part, because the people working on EE in Yogyakarta and Surabaya were largely unaware of national policy. Despite having a strong commitment to EE, Surabaya had no written policies or guidelines in government offices or schools.
In order to understand EE in Indonesian high schools, it is important to understand the aims and expectations of the formal education system. As outlined in previous chapters, Indonesian curriculum, aims to build a foundation for the development of student potential to become:

a. faithful and fearful of God Almighty, moral, and noble;
b. knowledgeable, skilled, critical, creative, and innovative;
c. healthy, independent, and confident, and
d. tolerant, socially sensitive, democratic, and responsible [own translation]  
(Kementerian Pendidikan dan Kebudayaan [Ministry of Education and Culture], 2013:1).

Despite the diversity of these aims, the system is still one that rewards conformity and memorisation of facts and provides almost no opportunity for students to practise any skills that they may have learnt.\textsuperscript{124} Prestige (symbolic capital) in the form of high rankings is awarded to schools, principals, teachers and students based on the students’ ability to answer examination questions correctly. Students who follow rules and perform well in exams and ceremonies are held in high esteem. Natural curiosity is not encouraged, and students who like to ask difficult questions and challenge the status quo are not well received. These are not considered admirable traits and are not valued in the education system or broader community.

While reward and prestige were key themes identified in previous chapters for teachers and the schools involved in this study, I feel it important to highlight that it is a faux-prestige or second-rate prestige. While the endless competitions in Surabaya provided opportunity for teachers and schools to be rewarded – a strong theme in education see (Parker & Nilan, 2013; Raihani, 2008) – and gain prestige through winning or placing in the environmental competitions, this prestige is not equal to that of winning a science or maths completion or ranking in the top 10 schools in the city.\textsuperscript{125} By their own admission, the Yogyakarta schools were made to become Adiwiyata schools because they were not achieving highly in any other field. This does not mean that there is no value in such prestige. It is very valuable. It has provided an avenue for schools when they could not possibly compete with the top schools on an academic basis to excel in a non-academic field. It has also brought prestige to ‘non-academic’ endeavours, and opportunities for this are limited, meaning that ‘non-academic’ students often have a hard time at school and little opportunity to excel. Teachers made a clear distinction

\textsuperscript{124} One example that demonstrates this was when I heard a year 12 student from The Madrasah lamenting to his IT teacher that in the IT exam, they had to write about how to use a computer, rather than actually use one.

\textsuperscript{125} See Parker and Nilan (2013:94) for further description of \textit{prestasi} in the Indonesian education system.
between ‘academic’ activities, which were assessable, quantifiable and likely to be in exams, and ‘non-academic’ activities, which were not assessable, not quantifiable, unlikely to be in exams and therefore not valuable. Environmental actions associated with the Adiwiyata and Green Action’s programs (composting, recycling, etc.) were always considered ‘non-academic’ by teachers and therefore lacking real value and taking time away from ‘academic’ pursuits. This was the argument used by almost every school to justify the exclusion of year 12 students from environmental activities.

Bourdieu’s concept of symbolic violence can be applied to this situation. Bourdieu and Wacquant (1992:167 italics in original) describe symbolic violence as ‘the violence which is exercised upon a social agent with his or her complicity’. In regard to EE in senior high schools, the education system, principals, teachers, students, government officials and NGO staff were all in clear agreement that EE was beneficial for ‘non-academic schools’. This compliance suggests that all involved agreed that the ‘non-academic’ schools, students and staff were of lesser ability and therefore value; since EE was of lesser value than examinable subjects, they should participate in EE. This acceptance of the ‘self-evident truth’ that they were lower-achieving and less capable teachers and learners and therefore should participate in EE, demonstrated a form of symbolic violence. Using the same logic, it was clear that high achieving schools should not participate in EE nor should year 12 students. Bourdieu (1974:38) argues that teachers are ‘the products of a system whose aim is to transmit an aristocratic culture, and are likely to adopt its values with greater ardour in proportion to the degree to which they owe their academic and social success’. The level of engagement with EE in schools in this study depended largely on the schools’ academic capabilities. Teachers and principals were very aware of their responsibility to offer students the opportunity to gain as much prestige from their schooling as possible. Where they struggled to achieve prestige through academic means, they resorted to EE to provide it. Through participating in Adiwiyata and Green Action programs, and the performance of ritual, they had an opportunity to increase their prestige.

The Adiwiyata and Eco Schools programs offered very little educational value, though the Eco Schools Program offered many opportunities for prestige and career advancement for teachers. Unfortunately, many of these opportunities were not about environmental learning, but rather a ritual that offered prestige.

**Ritual in EE**

Parker (2003) found a striking conformity between the performance of the rituals of *pembangunan* (development) in a Balinese village and Geertz’s (1973) description of the rituals of Balinese religion.
Parker’s (2003:150) descriptions of the sometimes ‘useless, harmful or problematic’ outcomes of pembangunan and the associated rituals that she witnessed bore a striking resemblance to the Adiwiyata rituals that I observed: meaningless, empty performances with an absolute focus on documentation of numbers above all else.  

Parker (2003) described workers’ overriding concern with the evidence (a photograph) of the performance of the pembangunan ritual rather than with its effect or meaning. Endless pembangunan ceremonies involved mainly village women in much work and no useful product. Her descriptions of babies’ weights being recorded for no outcome reminded me of the methodical recording of the weight of used paper and cardboard (that may or may not have been recycled) in Adiwiyata schools. Her reference to the constantly changing plethora of competitions and categorisations being used to grade the villages of Bali sees strong parallels with the countless competitions and categorisations in both the Adiwiyata and Green Action programs.

Parker (2003) quotes the following passage from C. Geertz (1973: 177):

[W]hat is crucial is that each ritual detail should be correct and in place ... the worshippers usually don’t even know who the gods in the temples are, are uninterested in the meaning of the rich symbolism, and are indifferent to what others may or may not believe. You can believe virtually anything you want to actually, including that the whole thing is rather a bore, and even say so. But if you do not perform the ritual duties for which you are responsible you will be totally ostracized, not just from the temple congregation, but from the community as a whole.

The same could easily be said of the Adiwiyata program and Green Action’s Eco Schools activities. Many teachers felt burdened with the task of running the Adiwiyata program and were clearly performing the ritual with little interest in the importance, relevance or potential of the program to bring about positive change. Despite their criticisms of the Adiwiyata Program, Green Action’s activities were also very ritualised and lacking in connection to the environmental problems. The YEL-

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126 A teacher weighed every item that came to the school recycling bank and recorded the details of which class it came from; the date and teacher responsible were also documented by another teacher. Every pot plant in the school was allocated a number (on a sticker), and plants were regularly counted and numbers recorded. Student participation numbers were always documented, but the outcomes (environmental and educational) were not.
YEL competition (described in Chapter Six, photos below) was a vivid and colourful example of such a ritual. The Eco princess competition was another popular example. The costumes that were supposed to be made from used materials were almost identical, with three or four exceptions. Most costumes were made of plastic bags or empty plastic packaging. The plastic bag costumes were too pristine and matching (not a shop logo in sight and all exactly the same colour) to have been made from used bags. Even the way that students moved in their dances was similar across the schools, with most standing in lines and marching on the spot, moving hands to the left and right and moving their hips on the final beats of the music. The various rituals of the Adiwiyata and Green Action programs allowed schools and participants to appear to be doing something meaningful, like Geertz’s worshippers, but closer inspection revealed that it was a means to obtaining the ultimate goal of their efforts – reward and prestige from Green Action, the Surabayan government and the Environmental Agency. Thus, the value of the competition was not restricted to reward and prestige for the participants; it also reaffirmed the relationship between Green Action, the Surabayan government and the Environmental Agency – all of which relied on the others to make them look good.

Debord’s (1994 [1967]) work, Society of the Spectacle, can be used to consider the array of competitions run by Green Action as a spectacle. Debord (1994 [1967]:fourth thesis) writes: ‘the spectacle is not a collection of images; rather it is a social relationship between people that is mediated by images’. He explains that the spectacle is capital accumulated to the point where it becomes image. The social relationship and the accumulated capital that are the spectacle is demonstrated in the YEL YEL competition and the relationships between schools, Green Action, the Surabayan government and the Environmental Agency. The images portrayed as a result of the YEL YEL competition serve all parties well, and their relationships rely on them. The relationships and the competition have little connection to EE, but, rather, serve to support the image of Surabaya being ‘green and clean’ and having good government and education systems.
Figure 7.7 Eco princess mascot one, two and three

Source: Kelsie Prabawa-Sear

Figure 7.8 Well-formed lines and basic movements

Source: Kelsie Prabawa-Sear
These students (Figure 7.10) wore 3R on their faces (reduce, re-use, recycle) whilst wearing costumes that appeared to contradict this message.
Green Action developed these opportunities for ritual and through their relationships with sponsors and the Surabayan government (their social capital), as they offered cultural capital and symbolic capital (*prestasi*). However, the level of capital on offer was low enough that it was only enticing for the lesser achieving students and schools. Green Action’s reliance on offering capital to schools in return for participation was successful because the rest of the education system is highly competitive; most principals, students and teachers lack the social and economic capital to gain the level of symbolic capital that they desire. Green Action’s and the Adiwiyata programs offer this. While the level of prestige offered by these environmental competitions and rewards does not equal the prestige gained from academic competitions, the schools involved understand their limitations and accept the prestige on offer without question.  

**Documentation (not cheating)**

Documentation is unavoidable in Indonesia and is part of almost every aspect of life. While a strong focus on documentation goes back at least as far as Suharto’s time, its use seems to have changed from a focus on surveillance to attempts to demonstrate that one is not cheating or behaving in an immoral or corrupt manner. It can be assumed that most people in any society would prefer not to been seen to be involved in cheating, immoral or corrupt behaviour. While this appears true for

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127 Parker and Nilan (2013:94) highlight the point that *prestasi* is an assumed social good – no-one ever questions the value of *prestasi* – and it becomes an essential quality of a person.
Indonesia, it still struggles with corruption at all levels of government (Transparency International Indonesia, 2018). Indonesia’s highly religious population, while functioning in, and therefore supporting the continuation of corrupt systems, tries particularly hard to be seen as ‘clean’. Documentation and religious piety are two avenues to help one appear ‘clean’, and both play strong roles in the Indonesian education system, which encourages religious piety and an adult culture. Various teachers informed me that it was most important to document everything for Adiwiyata, not only to obtain a higher ranking, but also to demonstrate that they were not cheating. Teachers at The Madrasah assured me that it was important to scan one’s eyes on the biometric eye scanner on time each morning to prove that no-one was cheating the system by coming to school late. The school leadership did not scrutinise pedagogies, practice or how time at school was spent by teachers. The focus was on teachers arriving on time and exam results being satisfactory.

The neoliberal focus and ensuing audit culture seen in Indonesian schools are evident elsewhere. In writing about education in the UK and North America, Apple (2001, 2005) describes how neoliberalism requires the constant production of evidence that one is doing things ‘efficiently’ and in the ‘correct’ way. Apple (2005) argues that the widespread nature of evaluative and measurement pressures in education crowd out other conceptions of effectiveness. He notes the increasing standardisation and technicisation of content within teacher education programs and the constant pressure to ‘perform’ according to imposed and often reductionist standards. Apple (2005:11) also suggests that the reliance on documentation in education is also related to the position that ‘only that which is measurable is important’. This is accurate in relation to both EE and the wider education system in Indonesia – in the Adiwiyata schools, quantification (weight of paper sorted for recycling) is more important than whether the paper actually gets recycled (not reported on), and in the wider education system, the focus is on testing and exams over learning and critical thinking.

In order to move up the Adiwiyata rankings (and therefore gain second-rate prestige/ symbolic capital), schools are required to provide documentation proving every detail of their claims. Teachers shared with me files and reports outlining their Adiwiyata Program efforts that often did not match my observations. Mas Rudi from Green Action was on an Adiwiyata jury for East Java. He told me that he was a good judge because he could tell which schools were really doing what they reported and which had ‘monuments to compost’ (shredding machines and composting areas that were rarely

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128 For more on audit culture in education, see Apple (2001, 2005); Kamens (2013); Maas Taubman (2010).
129 This type of counting and reporting and the exclusion of outcomes in reporting is not unique to Indonesia. Many Australian schools would be able to report on volumes of items collected for recycling, but few could report on whether or not these items were actually recycled, landfilled or sent overseas for ‘processing’.
used). At a workshop run by a German-funded NGO (discussed in the NGO section below), the facilitator discussed with participants the importance of documentation. He asked them to brainstorm all the different types of evidence that they could use in their documentation. Participants made various suggestions such as photos, attendance lists and written reports. I was surprised when someone suggested CCTV footage. The facilitator agreed that CCTV footage was a good source of evidence. The fact that schools had CCTV footage of students was troubling to me; the idea that this form of surveillance should be used to gain prestige for an EE program was unbelievable.\textsuperscript{130} Clearly the aims of EE (whether educational or environmental or both) had been lost in the desire to gain a higher Adiwiyata status. The Adiwiyata Program was the pinnacle of audit culture in EE in Indonesia.

The neoliberal accountability process of the Adiwiyata program, with its prioritisation of numbers and documentation above all else, facilitated this loss of meaning and purpose for the Adiwiyata program and allowed it to become an exercise in how to gain prestige by doing as little as possible. Unfortunately, just having the facilities (shredders and composting areas, greenhouses, recycling bins) and having large numbers of students attend events such as 	extit{Sabtu Bersih} and Rubbish Day (even if they did not participate) were enough to meet the requirements of the program. Like the example of the school that separated waste that was then combined again to be disposed of, these efforts to look green, or to meet the Adiwiyata requirements, were demonstrating to students that actions do not matter: what matters is the documentation, that the school looks like it is doing the right thing.\textsuperscript{131} Continual exposure to these superficial attempts (if not fraudulent behaviour) would surely have an impact on students’ understandings of the importance of EE and their environmental behaviours. I suggest that students, like teachers, would come to see it as little more than an opportunity from which one can gain prestige and prizes.

The schools in Surabaya did not buy in to the Adiwiyata Program in the same way that the Yogyakarta schools did. This was largely because they found the documentation requirements too arduous. Instead, they had the opportunity to gain prestige and win prizes through the Green Action program which did not have the same documentation requirements. It was clear that the documentation and facility requirements of the Adiwiyata Program were a barrier to some schools joining the program, or progressing through the ranks, but neither requirement stopped schools from cheating. Instead,

\textsuperscript{130} Surveillance equipment such as CCTV systems would be extremely expensive and unattainable for most schools. This would require funds that could be better spent on services such as providing books in the sparse libraries, IT equipment, or free access to clean drinking water for students.

\textsuperscript{131} This type of deceitful practice does not only occur in Indonesian schools. I am aware of the same practice occurring in some Western Australian schools.
they kept teachers busy with paperwork when that time could have been better spent engaging with students.

It is important to note that many of the issues related to EE in schools are also issues in education more generally. Cheating is an issue across the Indonesian education system. Students and teachers have been known to cheat in national exams through various means, including using jockey students (where a student completes the exam in the name of someone else), students sharing answers, and distribution of marking keys ahead of time (El Faruqi, 2016; ‘Individual cheating more rampant in national exams,’ 2016). In an effort to curb the culture of cheating in Indonesian schools, the School Integrity Index has been introduced. According to the 2015/2016 School Integrity Index results, the number of schools and students cheating has risen rather than declined in recent years (“Individual cheating more rampant in national exams,” 2016). The index is still in its early years and it may be too soon to be able to accurately analyse its impact. Its introduction, however, highlights how significant the issue of cheating is in Indonesian education.

**Missed opportunities in EE**

Almost any topic can become an EE lesson if the teacher is aware of the inter-connectedness of the different aspects of the natural environment and humankind’s actions. The Adiwiyata Program aims at sustainability being integrated across the curriculum, with the idea that sustainability can be taught as a part of any subject. After being introduced, the 2013 curriculum was recalled. The SMA (as described in Chapter Five) returned to the 2006 curriculum, whereas The Madrasah continued with the 2013 curriculum. There were various reasons given for the recalling of the 2013 curriculum, but there was a general consensus that teachers were struggling with it. It called for a different style of teaching and different marking criteria, and many state school teachers (whom I describe elsewhere as career bureaucrats) were unwilling and or unable to adapt to these changes. The Madrasah chose to continue with the 2013 curriculum, as they felt that the teachers were mastering the new approach to teaching and marking, and that to change back mid-term would have been unfair to the students.

Despite showing me documents outlining the subjects where sustainability was integrated, no teacher was able to demonstrate to me how they integrated sustainability into their lessons. The lessons that I was invited to observe were lessons taught straight from text books and were not an integration of sustainability into a non-science subject. Both the Head of Curriculum and the English teacher explained to me how sustainability could or should be integrated (the theory), but no-one was doing it in practice. What was outlined in their Adiwiyata documents did not match what was happening in
the classroom. This is not only a problem in Indonesia. Mokhele (2011) describes a similar situation in South Africa, where, in line with international recommendations and provisions, environmental learning was included as an integrated component of all subject areas in the primary school phase of learning.\footnote{Mokhele (2011:78) reports that the change to integrated EE policy came about as a result of international recommendations and provisions, ‘particularly those originating from the Johannesburg World Summit for Sustainable Development (WSSD) held in 2002’.} Despite this policy, Mokhele (2011:78) found that many schools all but ignored the environmental learning mandate. This was exactly what I observed in the Yogyakarta schools.

**Why EE is not being integrated across the curriculum**

There are various factors that have contributed to the failure of schools to integrate EE across the curriculum (Hargreaves, 2008; Henderson & Tilbury, 2004; Redman, 2013). The commonly cited factors are: crowded curriculum and no specific time for EE; lack of teacher training or knowledge; focus on standardised testing; and declarative knowledge (information and scientific facts) being privileged over other types of learning (even within EE).\footnote{See Goussia-Rizou and Konstadinos (2004), Jiang (2004), Steele (2011) and Maulidya et al. (2014) who explore the difficulties and shortcomings of EE in middle and secondary schools in Greece, China, Canada and Indonesia. Generally, knowledge (environmental literacy) is privileged over other aspects of EE.}

Redman (2013) found that teachers in the USA tended to be hesitant about teaching sustainability topics when they did not feel sufficiently knowledgeable about the topic. With this in mind, if teachers were to integrate EE into their subjects in Indonesia, it would be most likely to occur in Biology and Geography classes, where teachers are more likely to know some of the basic environmental issues.

While it is a difficult task to integrate EE across lower levels of schooling, in Indonesia it is even more challenging for senior high schools, where subjects are taught by specialist teachers and students are streamed into one of three streams: Maths and Natural Science, Social Science, or Languages and Culture. This streaming of students means that students do not have access to non-compulsory subjects or subjects outside of their stream.\footnote{For example, a student in the Maths and Natural Sciences stream cannot study Geography, and a student in the Languages and Culture stream cannot study Biology.} The separation of subjects and streaming of students combined with the traditional approaches to teaching described elsewhere mean that integration of EE is not occurring and is unlikely to occur under the current system.

The challenges of integrating EE across the curriculum in Global South countries are well documented in regard to Nigeria and South Africa (Adedayo & Olawepo, 1997; Mokhele, 2011; Mokhele & Jita,
All of the challenges highlighted in the African case studies were evident in Yogyakarta and Surabaya. These included:

- few policymakers, curriculum writers and other education stakeholders having the experience needed to make such a focus on environmental learning workable within the current education system;
- the limited capacity of the provincial education offices to support schools in the expected integration of EE;
- many teachers lacking a coherent and practical vision of what such environmental learning should be in their classrooms.

In the case of Yogyakarta, schools and teachers did not have the support of an ENGO, and professional support was therefore extremely limited. The provincial level of the Environmental Agency offered no curriculum support or training for teachers; the district level officer (one person) in the Bantul and Yogyakarta office had no formal training or background in EE; and no education resources to offer teachers. The only resources that they could offer were the Adiwiyata guidelines, a list of books related to different subjects (most of which were impossible to source), compost bins, bins for separating waste and shredding machines. As noted in previous chapters, the existence of these facilities did not equate with their being used.

While teachers in Surabaya had the support of Green Action, there was no-one within the organisation with teaching experience or qualifications, and the Education Office did not offer EE-related training. While Green Action encouraged teachers to include environmental themes in their teaching, they did not focus on it nor offer any training or educational resources. Instead, it pushed for practical activities outside of the classroom and outside of teaching hours. By focusing on praktek, such as growing mushrooms, the teachers did not have to understand environmental issues. This way, they could all just do the physical activities as dictated by Green Action.

These shortcomings highlight the difficulties associated with a desire for development and the environmental problems which result. These problems are often viewed as ‘the inevitable concomitants which will correct themselves as time progresses’ (Adedayo & Olawepo, 1997:87). In Nigeria, most activities reported as EE focus on science and technological issues, rather than explore the value-laden questions of humankind’s (and each student’s individual) contribution to environmental problems and solutions. As in Nigeria, there is a focus on science and technical issues in Indonesia, but there is a general silence about what might lie ahead in regard to environmental
problems.

The final challenge specific to the Global South in providing effective EE is a lack of infrastructure. Adedayo and Olawepo (1997) quite rightly argue that EE in the secondary school curriculum cannot be expected to improve the quality of the environment without the provision of appropriate public utilities and infrastructure. They cite the example of not having regular public supplies of water, which lends itself to public defecation. This is also a problem in Indonesia where many people are forced to use local waterways to bathe, defecate and wash clothing because there is no water infrastructure, their wells are dry, or water is in short supply. Similarly, with few cities having public waste management services, many people resort to burning rubbish or throwing it into rivers, which leads to more environmental problems. One of the Yogyakartan schools that is a leading Adiwiyata school asks students to separate waste, but because of a lack of waste services, the separated waste is collected by a private contractor, who then recombines the organic and non-organic waste and disposes it. The students can see this happening just outside the school gate. Not only is this situation failing to achieve any positive environmental outcome, it is hypocritical and demonstrates to the students that it is not what you do that counts, it is what you report that you do (to Adiwiyata judging panels). Students know that there are no separated waste services available in their region, so without a word being said, students are being taught that positive environmental actions do not really matter.

As demonstrated in the literature and in the Yogyakarta and Surabayan schools (and in most schools in Indonesia), if there is no specified place for EE in the curriculum, it will not be taught. Various teachers told me that they preferred the 2006 curriculum because they could teach EE in the subject called ‘local content’, where there was an allocated time and a teacher who was responsible for teaching it.\(^{135}\) For those passionate EE teachers who had managed to teach EE as local content, this option was lost with the introduction of the 2013 curriculum. The only opportunity for EE in the 2013 curriculum was through integration into other subjects, which, as discussed, was not happening in the schools.

The Ministry of Education and Culture, it seems, is content to leave EE as the responsibility of the Environmental Agency, but the Environmental Agency is very limited in its access to schools and teachers. As outlined previously, the Adiwiyata Program is a program of the national Ministry of the Environment and Forests which has no direct power or access to schools and very little influence or

\(^{135}\) Local content subjects are chosen at the discretion of the school and could include almost any topic that is deemed relevant to the local area. For example, Balinese students might learn Japanese and students in other regions might learn local art traditions and folk songs.
political power in the education sector. In addition to the reasons outlined above, I add two more factors that contributed to the missed opportunities and silences around EE in Indonesia: it is barely mentioned in the curriculum, and is missing from the text books, making it almost invisible in formal education.

(A lack of) EE in the senior high school curriculum

Pro-environmental elements are scarce in the Indonesian secondary curriculum. The Languages and Culture Stream is devoid of anything environmental despite hosting Anthropology, which would be an ideal subject in which to cover many issues regarding human impact on the environment. Environmental topics appear in Geography and year 10 Economics in the Social Science Stream as well as in year 10 Chemistry, Physics and Biology (Parker, 2016). However, environmental topics are integrated with religious messages, particularly gratefulness to God. I argue that this diminishes the sense of responsibility one has to the environment. Any personal responsibility for environmental stewardship is superseded by one’s responsibility to thank God and utilise the resources that He provides the best one can. Parker (2016:16) found that in the curriculum ‘there is more explicit agency ascribed to God than there is to humans with respect to the environment’.

While the curriculum plays a role in setting the standards for education in Indonesia, most teachers teach directly from textbooks and rely on these texts and examinations as guides for what is taught in the classroom (Parker, 2002). Teachers were not very familiar with the new curriculum requirements, but knew the textbooks and examination content well. Most textbooks are produced by the Ministry of Education and Culture and are distributed to schools. Other textbooks are produced by various publishers. These books must first be approved by the Ministry of Education and Culture to be used in schools. If schools use unapproved textbooks, they do not receive funding to cover the cost of the books by the government. Some private schools choose their own text books (and ask parents to pay for them), and it is not uncommon for private primary schools to produce their own textbooks. The Principal from an Islamic primary school in Surabaya explained to me that by doing this they could integrate the messages that they felt were most important, integrate local content and in some cases use names and photos of students in the book to make it relatable and interesting for the students.

There is considerable opportunity to include environmental themes in textbooks of every subject, but, disappointingly, this barely occurs. In instances where environmental themes are included, they tend to be presented in a factual manner, for example, reporting an environmental event such as a landslide yet making no comment on what might cause a landslide. Failing to recognise humankind’s
contribution to such ‘natural disasters’ promotes simplistic, isolationist thinking. One such example is evident in the Year 10 English textbook (Kementerian Pendidikan dan Kebudayaan [Ministry of Education and Culture], 2014). This government-produced textbook has a chapter on ‘Visiting Ecotourism Destination’ [sic]. One of the tasks is for students to read a passage and answer some questions. The text (below) is about the Tanjung Puting National Park (and the orangutan rehabilitation centre established by Dr Birute Galdikas). The article makes passing mention that the rehabilitation centre is a place for ex-captive orangutan and a preservation site. It makes no comment on the fact that orangutan are a protected and endangered species; that they are only found in Indonesia; that it is illegal to have them as pets; or that they are under threat from the illegal wildlife trade, palm oil expansion and habitat loss. It fails to mention that many of the orangutan at the centre are babies whose mothers have been killed (and are not ex-captive). It also fails to examine the basics of eco-tourism, the impacts (positive and negative) of eco-tourism or what makes a destination appealing to eco-tourists. The passage jumps to asking students what they would do if they met an orangutan in the jungle. It does not mention: that with dwindling numbers they are difficult to find in the jungle; that tourists should not approach orangutan; or that an eco-tourist has a responsibility to help protect and conserve these animals. It also assumes that all of the students live in cities and these cities have parks.
There was ample opportunity to ask questions of the students that would encourage them to think more deeply about the situation. For example: Why should we preserve the rainforest? Why do we need a preservation site? What role does tourism play in conservation? Where do you think these captive orangutan come from? Why is it illegal to keep orangutan as pets? The final and most obvious place to raise these issues is in the ‘Points to Ponder’ section. Instead of focusing on the eco-tourism or environmental elements most pertinent to the issue (conservation of rainforest and an endangered
species), students are asked about rubbish and what tourists should do with it (reverting back to the simple clean and green message).

This passage and related questions are a perfect example of the silences around human behaviour related to environmental problems. With a few simple changes, this activity could have been an
excellent example of integrating EE across subjects, but instead it is an example of missed opportunities in Indonesian textbooks.

With the Ministry of Education and Culture uninterested in and bearing no responsibility for EE, the very limited access of the Environmental Agency to schools, and the almost complete silence around environmental responsibility in the curriculum and textbooks, the possibilities for EE in senior high schools in Indonesia are extremely limited.\(^{136}\)

**Education culture**

Previous chapters have described the education culture in Indonesia as one that rewards compliance and rote learning, and often values bureaucratic ritual over teaching.\(^{137}\) In Bourdieusian terms, it utilises inculcation to reproduce its cultural arbitrary (as is mandated), but only after a time-lag which maintains the cultural backwardness of the education system (Bourdieu, 1977b). In Indonesian education culture, like education cultures elsewhere, there is still a strong ‘top-down’ approach to education (even post-decentralisation), and students are generally not afforded agency in their educational experience.\(^{138}\) Principals, teachers and students are all subjects in a bureaucratic hierarchy and most appear comfortable with this structure. Bourdieu (1977a; 1992) describes this type of imposition, where the group or individual complies (often unaware of the imposition), accepting it as a self-evident, as symbolic violence.

In order to locate itself within the formal education system, EE needs to be part of this bureaucratic system and hierarchy which is overseen by the Ministry of Education and Culture. The Adiwiyata Program, however, was developed outside of this system, in order to meet the expectations of UNESCO around the Decade of Education for Sustainable Development. A very important question that needs to be explored is to what extent this current education culture (and curriculum) is compatible with UNESCO’s expectations around ESD. As it stands, UNESCO’s approach is to lobby governments and support the work of ENGOs which are expected to use ESD in order to receive funding and demonstrate their competence. Teachers in Adiwiyata schools are also expected to be able to integrate EE across the curriculum, relying on teachers who are not involved in the program

\(^{136}\) Many of the difficulties around environmental content and curriculum noted in this chapter are also experienced by secondary schools outside of Indonesia. See Goussia-Rizou and Konstadinos (2004) on EE in Greece; Jiang (2004) on EE in Shanghai, China; Steele (2011) on EE in Toronto, Canada; Tilbury et al. (2005) on EE in Australia.

\(^{137}\) This type of education structure is found in many countries and is not unique to Indonesia.

\(^{138}\) This is not to say that they do not have any agency. See Parker (2002) for ideas of subjectification of Indonesian students.
(and therefore not benefitting from it) to integrate unfamiliar content into their subjects. There is an expectation that teachers will be willing to and capable of switching from a reliance on textbooks to developing new materials that integrate environmental themes into their subject areas. Bourdieu (1977b) argues that an education system cannot fulfil its ‘essential function of inculcating’ unless it produces and reproduces the conditions capable of reproducing a habitus as homogeneous and durable as possible. The work of schooling, he argues, ‘is predisposed by the institutional conditions of its own reproduction to restrict its activity to the limits laid down by an institution mandated to reproduce a cultural arbitrary’ (Bourdieu, 1977b:57). Applying this to the Adiwiyata Program, it is evident that the program requires teachers to take an approach to their teaching that is foreign to the education system and their experience, and is not supported by the institutional conditions.

Barrett et al. (2005) acknowledge the difficulties experienced by both teachers and students in redefining and assuming unfamiliar roles that challenge the traditions of education. They argue that the roles of ‘powerful teacher and submissive student carry both the authority of law and the weight of tradition, despite educational theory and educational practice [proposing] a counter theme of independent learning and critical and creative thinking’ (Barrett et al., 2005:514). I argue that the traditions of power that are well documented (Freire, 1996; Hayward, 2000; Karabel & Halsey, 1977) are strong and well reinforced in Indonesian schools, where one’s higher status is respected and celebrated as an important part of the culture (Anderson, 1990).

Barrett et al. (2005) argue that engaging in action-oriented activities in schools challenges dominant conceptions about the organisation and transmission of knowledge, creating, for most teachers and students, contradictions with standard approaches to teaching and learning (Barrett et al., 2005). This is exactly what Rubbish Day (described in Chapter Five) appeared to be, a contradiction on various levels. In order for Rubbish Day to be an action-oriented, agency-developing event, it would have required a flip of the normal power structure and suspension of adherence to traditions of authority and power. Teachers appeared unwilling to afford the student organisers of Rubbish Day any agency or power. In Javanese society, the quantum power in the universe is perceived as constant, so in order for students to gain power, a holder of power must forsake some of theirs (Anderson, 1990 [1972]). Anderson (1990 [1972]:26) also highlights the role of ceremony and its relationship to power, arguing: ‘One should not underestimate the dynamic and aggressive aspect of these ceremonies and the degree to which they represent to the participants the conjuring of Power.’
While various teachers told me on Rubbish Day that they were ‘trusting’ the students to run the event, there was little indication that any member of staff was actively supporting the students’ efforts and no indication that anyone was trying to empower students. This is not to suggest that the teachers wanted the students to fail; it was more that they were not responsible for the event and therefore were ambivalent towards the student leaders and the event. Bourdieu (1974:32) argues that is most likely ‘cultural inertia which still makes us see education in terms of the ideology of the school as a liberating force...even when the indications tend to be that it is in fact one of the most effective means of perpetuating the existing social pattern’. Despite the teachers ‘trusting’ students to run the event, the students reported that they felt that they had failed to engage their peers and had in fact produced a considerable amount of rubbish as a result of the event. It appeared that students had been afforded a faux-power, that the teachers had decided the event did not matter and therefore the students were trusted to run it. If the students ‘failed’, there was no outcome for the teachers other than to send a message to all involved that teachers are needed and that students could not successfully run an environmental event on their own. Despite the outcome, I thought that the students had prepared well for the event. With a small amount of support and guidance from staff, it could have been a positive, educationally valuable and morale-boosting event for the students.

Bourdieu (1977b:57) explains that teachers ‘operate within institutional conditions capable of both dispensing and preventing them from performing heterogeneous or heterodox work of schooling, i.e. those conditions most likely to exclude...any practice incompatible with the function of reproducing the intellectual and moral integration’ of the students. Both the Adiwiyata Program and the 2013 curriculum call for action-oriented approaches to learning, yet are structured in ways that make such approaches unlikely to occur. The Adiwiyata structure focuses on teachers achieving outcomes, despite aiming ‘to develop students who take responsibility in efforts to protect and manage the natural environment’ (Kementerian Lingkungan Hidup [Ministry of Environment], 2012:3). The general education culture (built on traditions of power), combined with the Adiwiyata structure, inhibits opportunity for students to engage in positive action. These structures, combined with cultural expectations, make it very difficult for students to share their ideas and engage in student-led action.

In focus group discussions and interviews, students from Surabaya and Yogyakarta reported reluctance to carry out environmental activities because of sungkan (one’s reluctance to do something on account of another person’s higher status). Students used this term to explain to me why they would not approach teachers with ideas for environmental programs or encourage elders to adopt more environmentally friendly behaviours. This idea of sungkan is not only relevant for students and
teachers – it is still evident across all levels of Javanese society. A child should not tell an elder what to do and a lower-ranking public servant should not openly question a decision from above, as respect for elders and superiors is an important and cherished part of Javanese and Indonesian culture. I suggest that this is a large barrier to schools changing from a top-down education system to a student-led, critical enquiry approach. No matter how often teachers are told (by the Ministry of Education and Culture) that they should use the new approach to education, while society still holds strong values around respect for position and sungkan, and educators (both in schools and NGOs) hold onto traditional roles and approaches to teaching, there will be a limited uptake of any shift from authoritative communication to dialogic communication (Stevenson & Stirling, 2010:225).

Throughout this thesis, it has been demonstrated that there is a need for greater understanding about environmental problems (environmental literacy) amongst teachers, government officials, NGO workers and students. Cole (2007:40) reassures readers that there is nothing innately wrong with EE’s concept of environmental literacy, but warns of a danger inherent in universalising it and argues that ‘by failing to recognize and deconstruct the White, western values and ideologies that dominate the discourse of environmental literacy, environmental education explicitly promotes and reproduces hierarchical systems of knowledge and excludes multiple ways of knowing and living in the world’. I argue that in addition to being cautious of universalising environmental literacy, we need to be cautious of universalising approaches to EE for the same reasons.

It has been demonstrated throughout this thesis that many of the characteristics of EE/ESD from the Global North are largely incompatible with the Indonesian education system, as it current exists. This is not to say that these characteristics are not valuable or effective approaches to EE. It does mean, however, that attempts successfully to integrate them into the Indonesian education system will require a culturally sensitive approach that accommodates the expectations of the education system (knowledge-based, examinable content available in textbooks and included in the curriculum) and teacher ability with effective EE characteristics (critical thinking, problem-solving, student-led actions). Later in this chapter, I offer an example of such an approach.

**The role of NGOs in Indonesian EE**

Environmental NGOs play a very important role in environmental management and education in many parts of the Global South (Bryant, 2001; Tilbury et al., 2003). Indonesia is no exception. 139 While the

139 Article 19 of the 1982 Basic Environmental Management Act explicitly acknowledges NGOs as active players in the nation’s conservation efforts (Colombijn, 1998).
need for ENGOs is increasing (Rutherford, 2007), their focus on issues and their levels of influence on policy vary, depending on factors such as: the size of the NGO; its funding sources; whether it is a local, national or international NGO; and its relationship with government (Batley & Rose, 2010; Bryant, 2001; Colombijn, 1998). Difficulties faced by NGOs include: a mismatch of perceptions and priorities among NGOs; restricted and ephemeral (project-based) funding; reliance on government relationships or other forms of support; conflict with or co-optation by government; and possible loss of flexibility and independence for NGOs (Batley & Rose, 2010; Bryant, 2001; Colombijn, 1998). Where these difficulties can be addressed and overcome, there are numerous benefits for the government, NGOs, schools, students and the environment.

As demonstrated in Chapter Six, Green Action was able to provide a level of expertise and flexibility that the government could not. In return, Green Action was provided access to government officials and people of influence where they had success in pursuing the green agenda, to the extent that EE was made mandatory in Surabayan schools. Colombijn (1998) argues that despite the many obstacles faced by ENGOs in Indonesia, they have achieved remarkable successes. Green Action in Surabaya is one such example. Findings from Surabaya support those of Batley and Rose (2010): NGOs can exert influence on both policy and service delivery where they take time to establish a reputation, show clear expertise, invest in building informal relationships with government, and ensure that they are not dependent on any one source of funding.\textsuperscript{140} The nine ENGOs that I met in Yogyakarta, however, have not managed to do this. Their lack of success was largely due to a failure to build relationships with government offices, which meant that they could not gain access to schools in any widespread manner. The ENGOs in Yogyakarta also lacked expertise in EE and were therefore unable to fill the void.\textsuperscript{141}

While the Yogyakartan ENGOs appeared to have little expertise in EE, I was pleased to observe the work of a German-funded NGO when I accompanied The Madrasah to a full-day training session. Held at the Novotel Hotel in Solo, this workshop was of a different standard to any other workshops that I had seen in Indonesia.\textsuperscript{142} The main facilitator was charismatic and confident, and encouraged student participation, even when teachers attempted to answer in place of the students. The workshop

\textsuperscript{140} Green Action was able to influence government despite a lack of expertise in EE. This, I argue, was because, relative to government employees and most teachers, Green Action appeared to have expertise and its staff worked hard to give that impression.

\textsuperscript{141} The Environmental Agency had one Adiwiyata officer at the city and DIY level. The officers in the Bantul and Yogyakarta offices and the DIY office had no environmental or education background or formal training.

\textsuperscript{142} This was before I had attended the national training workshop for the Environmental Educators Network in Surabaya (described above), where I met many professional environmental educators. Some of them had considerable experience and expertise in EE.
worked with teacher and student representatives from five schools on how to improve their Adiwiyata programs through increased student involvement in planning, action and documentation. Disappointingly, there was no noticeable change to the EE program at The Madrasah after the workshop. Despite the excellent workshop and impressive skills of the facilitators, the school (teachers in particular) did not have the capacity or desire to bring about change. All of the teachers at the school (not just the two who attended the workshop) needed more professional development in order to be able to integrate EE into the curriculum and to better understand how students can play an active and meaningful role in EE. Ideally, such training would be provided (across Indonesia) by the relevant Offices of Education in partnership with an NGO specialising in EE.¹⁴³

Based on three case studies from China, The Philippines and The Pacific Islands, Tilbury et al. (2003:61) suggest that NGOs in the Asia Pacific had become involved in ‘pushing the boundaries through education programs’. Previously ‘involvement in environmental education remained limited to adding value to existing formal education activities’ with school-based programs focused on single conservation issues (Tilbury et al., 2003:61). I argue this is still largely the case in Indonesia. While Green Action (through the Eco Schools activities) focused on two main issues (waste management and water conservation) in Surabaya, it still largely focused on adding value to the existing activities occurring as a result of the Adiwiyata program. Of the 30 ENGOs with whom I engaged over the course of my time in Indonesia (including those from the national EE network), approximately 20 focused on a single environmental issue. Although it is not outlined in this thesis, I have had considerable experience working with EE centres in East Java, North Sumatra and South Sulawesi, each of which focused very much on adding value to current formal education programs (the Adiwiyata Program in particular). Had the centres not done this, it would have been too difficult for them to engage schools (which are very restricted by the rigid curriculum and focus on exams). The NGO staff at all three centres also lacked the training and expertise to be able to take any other approach to EE.

As outlined above, there is a void in the Indonesian education system with regard to EE. Environmental NGOs with expertise in EE could go a long way to filling this void. While there are many ENGOs, there are few that specialise in EE and have the expertise required to improve the current approach to EE. For those that do have this expertise, it is very difficult to get government support and therefore access to schools. Through cooperation with partner organisations (whether they be universities, international NGOs, or through the national EE network), national and local NGOs could improve their expertise and ability to assist schools with EE. This assistance would most likely take the form of

¹⁴³ See Rose (2011) for discussion on engagement between government and NGO education providers.
providing in-service teacher training and assistance with hands-on projects. This cannot be done, however, without the support of the Ministry of Education and Culture and the relevant government offices at all levels. The following section explores a working model for EE in formal education in Indonesia.

**What would be a workable approach to EE in Indonesian schools?**

We cannot wait nor hope for a perfect school system or all the absolutely best answers but must muddle through, implementing and improving our approaches as we go (Redman, 2013:18).

In order to establish a workable model for EE in Indonesian schools, it is important to be clear on the aims first – not the aims of UNESCO or the North American Association for EE, but for Indonesian EE. Should Indonesian EE focus on knowledge about the environment (science) or a heightened understanding and sense of responsibility and engagement in more environmentally responsible behaviours? Because of the dire state of the environment, should it prioritise environmental outcomes over student-led approaches (as we see in Surabaya)? Or should it aim to produce critical thinkers who will define for themselves what the issues are and how they should be tackled? These aims do not necessarily fit neatly within the current formal Indonesian education system. Through examining and further understanding the difficulties and the extent to which UNESCO’s ESD models and Indonesia’s formal education system are compatible or otherwise, we are better positioned to identify approaches that are culturally appropriate, educationally valuable and result in positive environmental outcomes.

Berryman and Sauvé (2016) caution readers of the need to be realistic and consider the historical, cultural and ecological contexts of EE. As discussed above, Indonesia experiences the challenges of being an emerging middle income nation, having a deeply religious population, a strong top-down education culture, and a long history of colonisation and strong leadership. It is widely acknowledged that traditional forms of education (as seen in Indonesia) do not support preferred approaches to EE (Gruenewald, 2004; P. Hart, 2008). Competencies such as critical thinking, imagining future scenarios and making decisions in a collaborative manner do not fit well within the current education system. There are many factors that could impede the pace of change in the Indonesian education system. These include: an enormous education system servicing almost 50 million students (Sekretariat Jenderal, 2017); geographical, cultural, religious and linguistic diversity; a strong culture of bureaucracy; low levels of teacher training (though it is constantly improving); and, despite calls by
educationists, a persistent focus on national exams. There is, however, an urgent need for environmental action and increased responsibility by society for environmental outcomes in Indonesia, and EE can play a leading role in this. I argue that Indonesia needs its own unique approach to EE that meets its complex cultural, educational and environmental needs, rather than trying make internationally promoted approaches to EE fit where they simply do not.

Gruenewald (2004) argues that even when EE is included in the formal education system, it is muted in order to fit and therefore does not meet its own socially and ecologically transformative goals. Indonesia needs an approach to EE that meets the educational expectations of the broader education system and addresses the immediacy of the ecological crisis that the nation is experiencing. I therefore argue that EE in Indonesia needs to be a compulsory subject at all year levels and across the three senior high school streams with a clear, defined place in the Indonesian curriculum. The content for the EE subject needs to be included in national exams, in order to be afforded academic value. Like any other subject in the curriculum, teachers would be required to understand the content and there would be textbooks to facilitate the teaching and learning. This subject would provide a dedicated time for students to learn the science of the environment (about the environment) and with the right textbook content and questions, could facilitate deeper considerations about the complexities of the environment and environmental issues, aiming at students being able to identify humankind’s role in environmental problems and solutions.¹⁴⁴

This subject could include or be coupled with a practical element (the Adiwiyata Program, for the environment) that provided opportunity for students to apply critical learning to develop environmental action plans to be carried out as part of the (compulsory) Adiwiyata Program. These projects should be locally focused, include local Indigenous knowledge and address issues relevant to the local community. Such projects would provide opportunities to work with partner organisations, including NGOs, whilst the lessons would ideally provide context and explore the complexity of issues and their relationship with human behaviour. This approach would provide opportunity for assessment and exams (knowledge, theory, demonstrated ability to critically consider ‘the deepest problems of society’ (Giroux, 1999:146-147)), and the action components would be assessable for Adiwiyata, meeting the neo-liberal needs of the education system, which relies on scores and rankings. Such a structure would provide both ‘academic value’ and much needed environmental action.

¹⁴⁴ This environmental knowledge would include scientific learning and local Indigenous knowledge.
Unlike current Adiwiyata assessments that are based on participation numbers and meeting pre-defined targets, this proposed approach could focus on high quality EE which requires evidence of critical thinking, student-centred learning, action-oriented approaches for the environment, student planning and student reporting. Unlike the UNESCO model of ESD, I argue that there needs to be a focus on the environment over economics and self-interest in an effort to counter the current discourse in Indonesian education which places the natural environment as a resource to be exploited by humankind. Ideally, the messages taught in EE would be supported in religious teachings, by government, NGOs and the wider community. Ideally, the Adiwiyata Program would be located within MOEC in order to increase its perceived value, to increase opportunity for teacher training and to increase participation from non-religious schools.

What is needed to achieve this?

Bourdieu (1977b:61) cautions of the ‘cultural backwardness of school culture’ that results from education systems that reproduce the changes occurring in the broader society only after a ‘time-lag commensurate with its relative autonomy’. Any large-scale changes to EE in Indonesia would require changes in the wider community and in government. Strong support from the Ministry of Education and Culture would be required as a starting point. Fitting EE into an already crowded curriculum (particularly for religious schools, which teach more subjects and have more contact hours) would be a challenge, and it may be that EE would have to be included in citizenship education as a starting point. This would require the explicit expansion of citizenship to encompass environmental citizenship. Educators (teachers and Environmental Agency staff) would require in-service training (and pre-service training for university students), and this would require the support of NGOs at the international, national and local levels to work with government, schools and universities. It would also require inter-ministry co-ordination among the Ministries of Education, Environment and Religion. Additional infrastructure would be required in order to provide students and the broader community the opportunity to make pro-environment choices. This would require the support and commitment of all levels and departments of government, NGOs and private businesses.

Many of the challenges and shortcomings described in this chapter and the two preceding chapters are found in schools across the world, albeit at varying levels. Indonesia is an excellent example to consider because the state of the natural environment is such that immediate improvements and long-term actions are required and, if achieved, will have large-scale impact on the health and well-being of the population.

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145 Infrastructure may include waste management and recycling services, access to clean drinking water at schools, access to renewable energy and enforcement of current environmental laws at a local level.
of Indonesia’s people and on the world environment. There are various elements at play that impact on EE, including: the complexities of culture; the history and role of leadership; the uneven distribution of wealth; and the strong focus on academic achievement within the education system and the broader society, including by families of all socio-economic levels. It is important that the complexities of the situation do not prevent consideration of positive futures and consideration of how EE can develop to be more culturally appropriate, while achieving meaningful educational and environmental outcomes.

Conclusion

This chapter has considered the different approaches to EE in Yogyakarta and Surabaya and the role of government, NGOs and schools. Through a reflection on the differences between approaches to EE in Yogyakarta and Surabaya, the importance of leadership in the broader Indonesian context and in EE emerged. The chapter demonstrated how the two cities differed in their EE participation levels and environmental outcomes after having started from the same educational position: the same (lack of) national policy; the same lack of commitment and support by the Ministry of Education and Culture; the same positioning of the Environmental Agency beyond the education system; the lack of EE in the curriculum and textbooks; and the Adiwiyata Program (with its limitations). Both cities also suffered from similar environmental issues: no waste management or waste infrastructure, a lack of green space, flooding, and air pollution. Due to strong leadership from the Mayor in Surabaya, the support of multiple government agencies and a strong partnership with Green Action, Surabaya has seen some excellent environmental outcomes. Yogyakarta, in comparison, suffers from a lack of leadership in the environmental space, a lack of cooperation between government agencies and a lack of partnerships with NGOs. This has resulted in increasing environmental problems, very low participation rates in the Adiwiyata program and apathy amongst teachers and the wider community. Instead of environmental progress, Yogyakarta struggles with overdevelopment and a lack of public infrastructure and city planning. However, the Surabaya case cannot be viewed as a sustainable model to be applied to other regions, because it relies heavily on the Mayor, who is limited to two terms of incumbency, and Green Action, which relies on ephemeral and fluctuating sponsorship and donations.

While UNESCO’s ESD discourse is dominant internationally, in Indonesia there are many factors that influence the uptake of EE and how it is practically applied in schools. How government departments, schools and NGOs define EE greatly influences the form that EE takes in schools. This chapter has described how Indonesian EE focuses on clean and green and a ceremonial version of praktek, with an aversion to kotor and hitam amongst the general population, and how this influences the uptake
of a nature-relatedness approach to EE and building personal environmental connections. It has explored how the Adiwiyata Program is being manipulated, resulting in a focus on documentation and (not) cheating. The chapter considered how a desire for reward and prestige has contributed to EE (Adiwiyata and Green Action programs) becoming a ritual, with very little focus on learning. Various missed opportunities for EE were identified from classroom observations and examination of the curriculum and textbooks before the chapter employed Bourdieusian theories to consider the way in which the Indonesian education system and enduring education culture contribute to the current state of EE. The chapter then reflected on the role of NGOs in EE in Indonesia and how they can contribute to the development of EE going forward. The chapter concluded with suggestions for EE in Indonesia which take into account the cultural and educational expectations whilst aiming for the best educational and environmental outcomes possible.
Chapter 8: Conclusion

[Education] doesn’t always mean the same thing, and its intended meaning depends on how, and where, we use the term (Jickling, 1997:88).

Introduction

This thesis has aimed to investigate, amongst other foci, how EE can and does (or does not) contribute to the development of environmentally conscious and active schools and students. Through examining EE in senior high schools, it has considered the roles of UNESCO, government agencies, school communities and ENGOs in EE in the Javanese cities of Yogyakarta and Surabaya. It has utilised Bourdieusian theory and literature on Javanese culture, along with ethnographic data, to consider how Javanese culture impacts on the conceptualisation and practice (or lack thereof) of EE. The thesis has demonstrated that EE in Indonesia is a victim of the shortcomings of the education system in general. Many of the difficulties associated with integrating EE into formal education at the senior high school level can be partly attributed to problems of the Indonesian education system: a civil servant mentality amongst teachers; a heavy focus on exams and scores for academic subjects (from which EE is excluded); and a reliance on rote learning and traditional pedagogies. These issues, combined with a lack of understanding of environmental issues and how to integrate ‘the environment’ across the curriculum, have resulted in approaches to EE that focus on ritualistic participation and winning over learning. Finally, the thesis has offered contributions on how EE could be adapted to be more culturally appropriate and accommodate the requirements of the Indonesian education system, while achieving meaningful educational and environmental outcomes.

The following sections outline the main findings from Yogyakarta and Surabaya, the implications for EE and how EE could be reconceptualised in the Indonesian context to accommodate cultural expectations around education and local values. The chapter concludes by highlighting the contributions that this thesis makes to literature on EE in general and EE in Indonesia in particular and comments on possibilities for future research.
**Yogyakarta**

**Schools**

My ethnographic study of the two Yogyakartan schools has found the same approaches to teaching and learning in classrooms that have been reported by other researchers of the Indonesian education system: an almost absolute reliance on the textbook assigned to the subject, rote learning by students and a focus on content included in exams (Bjork, 2005, 2013; Parker, 2002; Raihani, 2012). Traditions of authority and power, respect for elders, knowing one’s place (*sungkan*) and a reliance on reporting numbers and examinable outcomes all play a significant role in maintaining long-standing approaches to education, even where EE (and indeed the curriculum) calls for a more active, learner-centred approach. The Rubbish Day example provided in Chapter Five demonstrated teachers’ reluctance to offer support and afford students agency in their (limited) environmental activities and students’ reluctance to challenge the status quo on account of values such as *sungkan*. This example served to highlight the critical importance and impact of cultural values on EE in schools, and the need for more culturally appropriate EE.

The point that distinguished both of these schools from most others in Yogyakarta was that they were *Adiwiyata Nasional* schools – the next to highest ranking – meaning that they had demonstrated to three judges’ satisfaction that they were integrating EE across the curriculum, in addition to meeting many other environmental benchmarks and achieving a score of at least 72 out of 80 in total (Kementerian Lingkungan Hidup [Ministry of Environment], 2013). My research found that not only were these two schools not integrating EE, the teachers confessed and demonstrated that they did not know how to do it. They only knew how to teach ‘*monotone*’. In the few instances where students moved outside of the classroom (such as the *Prakarya* mushroom-growing exercise in Chapter Five) there was very little focus on teaching or learning, but instead a focus on carrying out the required task. This lack of understanding did not impede the schools’ ability to win awards and progress up the Adiwiyata rankings. Because environmental content did not appear in any exam papers, it simply did not matter that students did not understand environmental concepts or the way that their actions could influence environmental outcomes. The absence of EE integration across the curriculum combined with the lack of environmental action (epitomised by the unused greenhouses and shredding machines) clearly demonstrated that for the two Yogyakarta schools, the Adiwiyata program was not serving an environmental or educational purpose, but was being used almost exclusively for reward and prestige for the teachers and schools. The lack of educational value attributed to the Adiwiyata program meant that the prestige was a second-rate prestige and therefore only desirable for ‘non-academic’ schools that struggled to gain prestige in academic fields.
**ENGOs**

ENGOs in Yogyakarta face many challenges in their efforts to facilitate EE in schools. While the ENGOs (COP in particular) were eager to offer EE to schools, they were ill-equipped to do so due to a lack of expertise and funding. Staff and volunteer at COP were reluctant to try student-centred approaches to EE and struggled with how to engage with schools. They did not know how to add value to the curriculum or to the Adiwiyata Program, which are two of the more obvious avenues into schools. This, coupled with a lack of support from the Department of Education, Youth and Sport (at the DIY level) and the Environmental Agency, meant that their access to schools was severely limited. Unlike the Surabaya example, ENGOs in Yogyakarta were not seen by government officials to offer a level of expertise that could benefit schools.

**Government**

The Yogyakarta chapter described EE in two schools and various ENGOs. Much of this situation can be attributed to the political situation, with the Sultan, Sri Sultan Hamengku Buwono X, and Mayor, Hariyadi Suyuti, showing no interest in environmental issues. Their desire to ‘develop’ Yogyakarta has continued unabated, despite community protests, a lack of infrastructure and increasing environmental degradation. Without direction and leadership from above, the Department of Education, Youth and Sport were under no expectation to support the Adiwiyata Program or any other EE initiatives. Without the support of the Department of Education, Youth and Sport, the Environmental Agency could not access teachers for training nor have open access to schools. This situation made it difficult for schools, teachers and individuals who wanted to engage in environmental programs and positive environmental behaviours.

The penultimate chapter explored the role of culture, power and leadership and how these are reflected in schools, ENGOs and government agencies in Yogyakarta and Surabaya. Teachers in the Yogyakarta schools both demonstrated and articulated the need for leadership in order to bring about significant change. Apathy towards the environment was evident in government departments, schools and many parts of the community in Yogyakarta, where people felt more comfortable to wait for leadership and direction, which was not forthcoming, than to initiate change.

Surabaya provided a contrasting example where strong leadership was directing environmental change.
**Surabaya**

**Government**

The later chapters of this thesis outlined the differences in leadership for the environment between Surabaya and Yogyakarta. Surabaya showcased very strong leadership from the Mayor Bu Risma with mandated support for EE (and Green Action) by the Department of Education, the Environmental Agency and the Department of Sanitation and Parks. Bu Risma’s leadership and the resulting support for EE and Green Action across these agencies saw very different levels of participation and environmental outcomes in Surabaya compared to Yogyakarta and much of the rest of Indonesia. While the current government and NGO approaches are producing high levels of engagement in EE and notable environmental outcomes, the sustainability of this approach is questionable. Whether or not the Surabayan government will continue this approach under the leadership of the next Mayor is yet to be seen. The reliance on private sponsors by Green Action also leaves EE in a somewhat vulnerable position.

**Schools**

The Surabaya chapter explored how schools were engaging with the Green Action’s programs in preference to the Adiwiyata Program. While Bu Risma had directed all schools to participate in EE, the preference for Eco Schools over Adiwiyata was attributed to the heavy burden of the requirement for excessive documentation (in order to combat cheating) in Adiwiyata and the many opportunities to win prizes (cash and environmental infrastructure), titles, and prestige through the Eco Schools Program. The top performers in Green Action’s programs had the chance to win the ultimate prize of a trip to Australia.

In addition to the unofficial mandate of the Mayor, Green Action had the support of the broader Surabayan government. The Department of Education, the Environmental Agency and the Department of Sanitation and Parks actively supported the work of Green Action, provided access to schools, teacher training and provided many of the prizes that the schools won.

This collaborative approach and the strategy of ‘forced participation’ resulted in some large-scale environmental outcomes across the city and within schools. However, despite being the labour force behind many environmental projects, students demonstrated that they did not understand their role in solving environmental problems or how these problems were inter-connected. Students were not
afforded any agency in the environmental actions, as Green Action and the Surabayan government dictated the design and implementation of the programs. The programs focused on the city’s least empowered citizens – students (as a source of free labour) and the urban poor. Students were allocated the task of being agents of change and influencing the behaviour of those higher than them on the social hierarchy. The wealthiest and most powerful in Surabaya appeared to be off limits and to be immune to the need for change. It was expected that they would follow the example of the urban poor, thus depending on the dynamics of shame (malu) to diffuse innovations being forced upon the poor.

**Green Action**

As a result of many years of facilitating relationships with government and schools, and with the support of the Mayor, Green Action has cornered the market for schools-based EE in Surabaya. While other ENGOs operate in Surabaya, none enjoys anywhere near the same access to schools (and therefore sponsorship opportunities) that Green Action does. Despite many years of partnering with the Perth-based ENGO, Kids for Change, Green Action has not adopted any student-led approaches to EE, and the organisation maintains a top-down approach with little interest in capacity building for staff. Green Action understands that forced participation and opportunities for prestige are the driving forces behind its success in attracting large numbers of participants; it therefore focuses on participant numbers and hours (which are easily reported and impressive). However, it demonstrates little commitment to EE that encourages learning and builds understanding of the complexity of environmental problems and possible solutions.

**National implications for education and EE**

Many of the issues and shortcomings of EE in Indonesia are directly related to the education system, its history and culture. The shortcomings and failures of EE observed in this research were related to issues such as teacher education and training, persistent pedagogies focused on rote learning and memorising for examinations and obedience to and preference for one’s role as a civil servant over being a teacher. As demonstrated in Yogyakarta, these education issues combined with almost no environmental content in textbooks, curriculum and exams, has left no space for EE in formal education, particularly in senior high schools. Even with large-scale participation, as seen in Surabaya, schools had not managed to overcome these educational issues. This meant that students were participating in environmental actions without learning about them. While leadership is needed for
any large-scale participation to occur, that in itself is not enough. The broader education issues still need to be addressed.

Stevenson and Stirling (2010:230) argue that the concepts of reflexive, relational and transformative agency are of particular relevance to environmental learning. As demonstrated throughout this thesis, there is currently no place in the formal education system in Indonesia for these concepts. Gruenewald argues that, ultimately, efforts to integrate EE into (Global North) schools are ‘dwarfed by the power of the dominant educational discourse, which serves different, arguably anti-environmental, ends’ (Gruenewald, 2004:74). Others (Barrett et al., 2005; P. Hart, 2008; Stevenson, 2007) have also acknowledged the clash of values and practice and the contradictions of ideologies between the environmental movement and formal education system which supports capitalism and preferences economic development above all else. With this in mind, serious consideration needs to be given to the question of whether EE belongs in schools – particularly senior high schools.

However, Indonesia’s natural environment and the people who suffer the most severe consequences of environmental degradation cannot afford to wait for the education system to improve in order to better accommodate EE. The penultimate chapter of this thesis put forward some considerations for how Indonesia could move forward with an approach to EE that meets the needs of learners, adjusts the expectations of the education system and provides positive environmental outcomes. The suggested approach would see EE made a compulsory subject at all levels of learning, and the content would be included in national exams (to make it educationally valuable). This subject would address the learning element of EE and would be coupled with a practical component (such as Adiwiyata), where students would have the opportunity to participate in actions for environmental outcomes. These actions should be locally focused and address issues relevant to the local community. They would provide opportunities to include local (Indigenous) traditions and knowledge, and to work with partner organisations (including NGOs). These actions could provide an assessable element for the Adiwiyata program, meeting the neo-liberal needs of the education system, and providing opportunity for much desired prestige. Unlike the ESD approach championed by UNESCO, this approach would focus on the environment over economics.

Reconceptualising global EE to accommodate culture and context

The studies of the two cities demonstrated clearly that UNESCO’s promoted approaches to EE do not always fit comfortably in contexts outside of the Global North. Pedagogies developed in the Global North cannot simply be applied to other contexts, particularly where education cultures and
perceptions of the natural environment differ. In Indonesia the natural environment is still viewed largely as a natural resource provided by God for humankind to use. Ideas around conservation, animal welfare and responsibility on a global scale are rare and are not covered in EE programs in schools or the curriculum or textbooks. The Yogyakarta and Surabaya examples highlighted the point that education, and particularly the social and environmental complexities of EE, cannot be separated from the histories and cultures of the places where that education takes place. The belief that a strong leader is needed, a bureaucratic education system based on rankings and the importance of knowing and respecting one’s place (sungkan) all influence EE actions, approaches and pedagogies far more than recently introduced concepts, such as student-centred learning, children influencing elders and critical thinking.

UNESCO and international partners are in a position to influence the direction of EE in Indonesia, but in order to do this more successfully and respectfully they need to move away from approaches based on Global North perceptions of education and EE. Their efforts in Indonesia would be more effective if they supported culturally appropriate approaches that meet both the educational and environmental needs of the local people and invested in education for pre-service and in-service teachers.

**Contribution to the literature**

There remains a dearth of literature on EE in Indonesia in both English and Indonesian publications. This thesis is a contribution to an area of study that deserves and requires the attention of many more thinkers. Recent publications on Indonesian EE have focused on awareness and knowledge of issues (Hadisuwarno, 1997; Kusmawan, 2007; Maulidya et al., 2014). Those of us in the field understand that levels of awareness and understanding are despairingly low in most parts of society. I encourage my colleagues in EE to address this gap in knowledge. I consider work in this area to be the beginning of a long journey, along multiple paths, towards developing an environmental sensibility in Indonesian students and the broader community. Now that we have confidently established that learners are being subjected to a form of EE that is not effective in educational terms nor in developing environmentalism, we need to consider further, and from multiple perspectives, why it is ineffective and how it could be made more effective in the context of the Indonesian education system.

This research project contributes to the literature through consideration of two very similar approaches to EE in Yogyakarta and Surabaya, but with two very different outcomes. This research explored the importance of culture in the EE context which has not been done in Indonesia before. It
highlighted the weaknesses of a ‘global’ approach to ESD, as promoted by UNESCO and many Global North governments. In calling for more culturally sensitive approaches to EE, it rejected the Eurocentric acceptance that Global North approaches to education are the apotheosis that we should be aiming for and acknowledged the neo-colonialism evident in the current approaches. This thesis could prove useful as a starting point for consideration of the applicability of ‘global’ approaches to EE in the Global South – an area of EE research that is in its infancy.

This thesis offers suggestions for different approaches to EE in Indonesia that were developed with consideration of culture and tradition. Culture and tradition impact on education and capacity for environmental change in schools and the broader community. The approaches put forward are likely to increase the perceived educational value of EE, access to environmental learning for students, and opportunities for positive environmental outcomes, whilst still meeting the strong desire for access to prestige and personal gain for teachers and non-academic schools.

**Future research directions**

Indonesia is a wonderful, unique country, rich in biological, cultural and religious diversity. Across Indonesia there is a persistent religious and educational discourse that portrays the environment as a resource provided by God, to be exploited for humankind’s benefit, and a general apathy about environmental problems by urban communities. There is a significant need for further research in all aspects of environmentalism and EE in Indonesia. This thesis focused on the urban Javanese context of Yogyakarta and Surabaya, and in doing so, excluded many places and cultural influences that should be further explored in order to understand the broader picture of EE in Indonesia. Raihani (2008) has called for research on every aspect of education in Indonesia as part of the education reform agenda. I support this call, as any improvements to the education system in Indonesia will have many benefits to students and the wider community, including improvement of the EE agenda.

N. Gough (2003:63) challenges us to consider how we can think *globally* in EE without enacting some form of epistemological imperialism. Jickling (2016) writes that we cannot solve environmental problems by being the same people who created them, and calls for bold experimentation. I echo this call for courage and determination in efforts to continue to research EE in Indonesia and not to despair, but to learn, share our learning and try to move towards a more positive future. While this is a difficult task which requires uncomfortable self-reflection and thinking beyond one’s own experience, research which can contribute to the development of culturally sensitive EE in Indonesia will have positive benefits for the broader education system, society and the natural environment.
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Appendix 1

Green Action itinerary for Perth visit

Wednesday, 3 June
4.15pm  Arrive Perth International Airport
         KfC bus to pick up and transport to accommodation at Kit’s house
7.00pm  Welcome pizza

Thursday, 4 June
7.00am  KfC bus to pick up and transport to Forum
9.00am  Discovering Our Rivers Forum, Point Walter, Bicton
3.00pm  Depart for Kit’s house

Friday, 5 June
7.00am  MK Bus to pick up and transport to Forum
8.00am  Discovering Our Rivers Forum, Point Walter, Bicton
4.00pm  Fremantle Evening Explore
         Fremantle Markets, fish and chips at Cicerellos
7.30pm  Train and bus home

Saturday, 6 June
Free Day
Prepare food for Sunday barbecue

Sunday, 7 June
9.00am  Depart Kit’s house
10.00am KfC Family Fun Day at Bibra Lake
       Visit Native ARC, meet the volunteers, help plant some native plants, undertake a
       bird survey at the bird hide and help clean up activity.
1.00pm  KfC picnic at Bibra Lake barbecue area
3.00pm  Return to Kit’s house

Monday, 8 June
9.00am  Coolbinia Primary School Visit
A day in the life of a River Ranger School. Work with KfC and River Rangers at the school and help develop a book to tell the story of the bushland.

3.00pm  Depart for Kit’s house
6.30pm  Vic Park Soup

[KfC student participant] will pitch his idea for a plastic free world.

Victoria Park Carlisle Bowls Club

Tuesday, 9 June
1.00pm  South West Metropolitan Council, Canning Vale
        Recycle tour

Wednesday, 10 June

        Perth Zoo Wildways tour

Thursday, 11 June
11.30am  Visit REmida (Creative re-use centre)
2.00pm  Immersion@ Gallery Central,
4.00pm  Indonesian Consul

Friday, 12 June
10.00am  Perth International Airport
        Depart 1.20pm