

Ph.D thesis title: **Why do countries join international literacy assessments? An Actor-Network Theory analysis with case studies from Lao PDR and Mongolia.**

Camilla Caterina Lanz ADDEY

Doctor of Philosophy in Education

University of East Anglia, UK

School of Education and Lifelong Learning

May 2014

This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with the author and that use of any information derived there-from must be in accordance with current UK Copyright Law. In addition, any quotation or extract must include full attribution.

Candidate name: **Camilla Caterina Lanz ADDEY**, University of East Anglia

Submission date: 31st May 2014

Degree: Doctor of Philosophy in Education

Title: Why do countries join international literacy assessments? An Actor-Network Theory analysis with case studies from Lao PDR and Mongolia.

Supervisors: **Dr Bryan Maddox**, School of International Development and **Dr John Gordon**, School of Education and Lifelong Learning, University of East Anglia, UK

Total word length: Approximately 87.00 words

Abstract

International assessments are a growing educational phenomenon around the world, increasingly picking up in lower and middle income countries and entering the space of global educational governance (Fenwick et al. 2014). Following the success of the OECD's first international assessments, the UNESCO Institute for Statistics (UIS) set out in 2003 to develop the Literacy Assessment and Monitoring Programme (LAMP) to measure adult literacy levels across lower and middle income countries in a context-sensitive way. As international organizations rationalize international assessments as essential tools for policy (Rizvi and Lingard 2010) target lower and middle income countries, researching the rationales behind these countries' participation becomes an urgent area of investigation.

In this thesis I enquire into what drives lower-middle income countries to join international assessment programmes through case studies of LAMP in the Lao PDR and Mongolia. Setting my research in the emerging field I define as International Assessment Studies, I argue that Lao PDR and Mongolia join international assessments for reasons that go beyond the need to inform policy (as stated by the UIS and the OECD) and to access foreign aid (Lockheed 2013). Different, and often contradictory interests are being played out through heterogeneous alliances (Latour 1996) which include human and non-human actors (including standardized testing instruments). Through the application of Actor-Network Theory, the data generated in my fieldwork suggests countries are joining the recent phenomenon of international assessments as a global ritual of belonging, comparing the gap with reference societies, and 'scandalizing' and 'glorifying' (i.e. statistically eliminating problems) with international data.

The thesis suggests that understandings of governmentality need to be revised in light of the international and comparative character of educational governance. My findings have implications for understanding the politics of reception of international assessments, but also for the upcoming Programme for International Student Assessment (PISA) for Development which the OECD is in the process of developing – in a similar manner to LAMP – for lower and middle income countries.

Table of contents

Chapter One Setting the context	15
1.1 Study genesis	15
1.2 Problem statement and research question discussion	17
1.3 The research gap in emerging International Assessment Studies (IAS)	20
1.4 Purpose of this research	22
1.5 Why LAMP? And why Lao PDR and Mongolia?	23
1.6 Clarifying concepts	25
1.7 Thesis structure by chapters	27
Chapter Two International assessments and international education policy	29
2.1 International assessments – a history and the politics of international assessments	29
2.1.1 A brief history of international assessments	29
2.1.2 What does it mean to count literacy? Moving away from literacy as a social practice....	37
2.1.2.1 Methodological and conceptual challenges	42
2.1.3 UNESCO and the UIS	47
2.1.4 What is LAMP?	54
2.2 International Education Policy and International Assessments Studies	61
2.2.1 International Education Policy.....	61
2.2.2 International Assessment Studies	72
2.2.2.1 International assessments for educational policies	81
2.2.2.2 Joining International Assessment Trends	83
Chapter Three Methodology.....	88
3.1 The case study contexts	88
3.1.2 Contextualizing Lao PDR and Mongolia	89
3.1.3 Literacy in Lao PDR and Mongolia	91
3.2 Methods of enquiry - interviews, data analysis and observations	93
3.2.1 Interviews and an analysis of my questions	93
3.2.2 Interviewing in English as a second language	96
3.2.3 Document analysis.....	97

3.2.4 Observations, and the lack of LAMP activities	97
3.2.5 Participants	99
3.2.6 Data generating timeline	103
3.3 Being an investigator	105
3.4 Trust	107
3.5 Meaningful data	112
3.6 Ethics	114
Chapter Four An Actor-Network Theory analytical framework.....	118
4.1 ANT's conceptual resources to understand LAMP participation	122
4.1.1 Non-human actors	123
4.1.2 Moments of translation	123
4.1.3 Piggy-backing	125
4.1.4 Black boxes	127
4.1.5 Centres of calculation	127
4.1.6 <i>In actu</i> power	130
4.2 An ANT methodology frame to enquire into LAMP participation	131
4.3 Applying ANT to an investigation of LAMP participation	134
4.3.1 LAMP's allies	134
4.3.2 LAMP's moments of translation	135
4.3.3 LAMP's black boxes.....	137
4.3.4 LAMP's centre of calculation	137
4.4 ANT's conceptual limitations to enquiring into LAMP participation	138
4.5 Conceptual contributions to ANT through its application to LAMP participation	140
Chapter Five Exploring LAMP's claims against how they are enacted.....	143
5.1 LAMP's policy claim	144
5.1.1 LAMP's policy identity constructed by its non-human actors	145
5.1.2 LAMP, a policy fairy tale	148
5.1.3 LAMP data for Lao policies – a local fairy tale?	151
5.1.4 LAMP data for Mongolian policies – a local fairy tale?	152
5.1.5 Conclusions to LAMP's policy claim.....	155

5.2 Cultural diversity or standardization? Black boxed tensions	156
5.2.1 Tracing LAMP's 'good intentions'	157
5.2.2 LAMP's human actors: the difficulty of black boxing contradictions	160
5.2.3 The local adaptability claim in Lao PDR and Mongolia	162
5.2.4 Conclusions to LAMP's local adaptability claim.....	165
5.3 LAMP's 'better data' claim: a convergence of interests	165
5.3.1 Multiple 'better data' interpretations	168
5.3.2 Is LAMP's data valid or made valid?	176
5.3.3 Conclusions to LAMP's 'better data' claims	179
5.4 LAMP's claim: to compare. Or maybe not.	180
5.4.1 Where are we in the world?	183
5.4.2 Conclusions to LAMP's comparative claim.....	187
5.5 Conclusions to LAMP's claims	188
Chapter Six Exploring what LAMP does not claim but drives participation	191
6.1 The LAMP process, a global ritual of belonging	192
6.1.1 <i>'We have to keep with the trend of the world'</i>	194
6.1.2 Playing a role in the global shift towards international measurement	199
6.1.3 Conclusions	201
6.2 The glorifying and scandalizing strategies for LAMP data	202
6.2.1 Lao PDR, the statistical eradication of illiteracy	203
6.2.2 Mongolia, a history of statistical eradication	206
6.2.3 Scandalizing with numbers	210
6.2.4 Conclusions	212
6.3 Opportunistic, personal reasons and resources	213
6.4 Conclusions to LAMP's unstated uses	214
Chapter Seven Conclusions	216
7.1 A contribution to Actor-Network Theory	216
7.2 Identifying the emergence of International Assessment Studies	218
7.3 Lower-middle income countries' rationales for joining international assessments	218

7.4 Implications for policy and practice	223
7.5 Areas for further scholarly exploration	225
References	226

List of figures

Figure 1. The rise of low and middle income countries participating in international large-scale assessments, pre-1990 to 2010. Page 36

Figure 2. A summary of the main understandings of literacy that have emerged through theoretical and empirical research in New Literacy Studies. Reproduced from Barton et al. 2000. Page 37

Figure 3. Data gathering timeline from December 2011 to November 2012. Page 104

List of black boxes

Black box 1. Page 145

Black box 2. Page 160

Black box 3. Page 168

Black box 4. Page 171

Black box 5. Page 183

List of acronyms

ADB, Asian Development Bank

ALL, International Adult Literacy and Life Skills Survey

ANT, Actor-Network Theory

APL, Adult Performance Level Study

ASEAN, Association of South East Asian Nations

BICSE, Board on International Comparative Studies in Education

CERI, Centre for Educational Research and Innovation

CMEA, Eastern Bloc Council for Mutual Economic Assistance

EFA, Education for All

EGRA, Early Grade Reading Assessment

ERCE, Regional Comparative and Explanatory Study in Latin American countries?

ESWG, Education Sector Working Group (Lao PDR)

ETS, Educational Testing Services

EU, European Union

GDP, Gross Domestic Product

HDI, Human Development Index

HQ, Headquarters

IALS, International Adult Literacy Survey

IAS, International Assessment Studies

ICT, Information Communication Technology

IEA, International Association for the Evaluation of Educational Achievement

ILD, International Literacy Day

IMF, International Monetary Fund

INES, International Indicators and Evaluation of Educational Systems

IO, International Organizations

JICA, Japanese International Cooperation Agency

LAMP, Literacy Assessment and Monitoring Programme

Lao PDR, Lao People's Democratic Republic

LDC, Least Developed Countries

LIFE, Literacy Initiative for Empowerment

LNLS, Lao National Literacy Survey

LPRP, Lao People's Revolutionary Party

LSUDA, Canadian Survey of Literacy Skills Used in Daily Activities

MOE, Ministry of Education

MOES, Ministry of Education and Sports (Lao PDR)

MoU, Memorandum of Understanding

MS, Member States

MSC, Ministerial Steering Committee

NALS, National Adult Literacy Survey

NatCom, National Commission

NCES, National Centre for Education Statistics

NFE, Non-Formal Education

NLS, New Literacy Studies

OBE, Outcomes-Based Education

OECD, Organization for Economic Cooperation and Development

OREALC, *Oficina Regional de Educación de la UNESCO para América Latina y el Caribe* (the UNESCO Regional Office for South America and Caribbean)

PASEC, Programme d'Analyse des Systèmes éducatifs des États et gouvernements membres de la CONFEMEN

PIAAC, Programme for International Assessment of Adult Competencies

PIRLS, Progress in International Reading Literacy Study

PISA, Programme for International Student Assessment

SACMEQ, Southern and Eastern Africa Consortium for Monitoring Educational

STS, Science and Technology Studies

TC, Teachers College at Columbia University

TIMMS, Trends in International Mathematics and Science Study

UIS, UNESCO Institute for Statistics

UN, United Nations

UNDP, United Nations Development Programme

UNESCO, United Nations Educational, Scientific and Cultural Organization

UNESS, UNESCO National Education Support Strategy

UNFEPEA, Universal Primary Education Including Universal Non-Formal Primary Education For Adults (in Lao PDR)

UNICEF, United Nations International Children's Educational Fund

UNLD, United Nations Literacy Decade

USAID, United States Agency for International Development

USD, United States Dollars

WB, World Bank

WCT, World Culture Theory

WEI, World Education Indicators

WTO, World Trade Organization

YALS, Young Adult Literacy Assessment

Dedication

I dedicate this thesis to **Bryan Maddox** and **Gita Steiner-Khamsi**. You have been a great inspiration to me. Thank you for believing in me as a researcher and helping me find my voice.

Acknowledgements

I owe thanks to many people. First and above all to my interviewees and all those who made my research possible – I cannot mention your names for reasons of confidentiality but you know who you are and how grateful I will always be for sharing your enthusiasm and valuable perspectives with me. **Bryan** Maddox for his truly invaluable support on a personal, academic and professional level and for our greatly stimulating discussions and projects, thank you for making this PhD experience simply fantastic. **Gita** Steiner-Khamsi for her endless support in Mongolia, for enthusiastically welcoming me as a Visiting Research Dissertation Fellow at Teachers College and her constant support throughout my writing up stage, thank you for your inspiring work and for believing in me. **John** Gordon for his excellent supervision, always asking the right questions. All the **scholars** whose work I reference extensively in this thesis, thank you for making this field of research for contributing to making it so fascinating. **Maria** Papaefstathiou for so many happy days of friendship discussing theory and applying it to all fields of life (i.e. Foucault and Latour applied to love and relationships), thank you for being part of my PhD years. **Ernesto** Giardina for giving me the happiness and emotional stability I needed to give my PhD the right attention. **Susana** Lago Ballesteros, **Amelie** Cassagne, **Katia** Sediakina, **Sohae** Lee, **Carla Maria** Liso, **Federico** Giovannelli and **Marina** Dapiran for being such great friends over these last years. **Amy** Lee for always welcoming me back to Norwich, thank you for making it possible for me to be a nomad with a home. My fantastic **PhD colleagues** in the School of Education and Lifelong Learning for making us feel like we were a little family; and the **doctoral students at Teachers College** for making me feel so part of their group. **Clinton** Roobinson for being a great ‘literacy mentor’ at UNESCO and beyond. **Karine** and **Céline** my housemates in Montreal for making my Montreal experience so ‘homey’ but also so surprising. **Holger** Grages for our endless, fascinating conversations in Laos. **Lamphoune** Luangxay for being a good friend and making my Lao experience unforgettable. **Mugi** Dambasvren Munhktsetseg for being a fantastic housemate in Ulaanbaatar. **Batchuluun** Yembuu for always being there for me in Ulaanbaatar. **Zaya** Boldbaatar, my Mongolian interpreter for being a good friend in Ulaanbaatar and taking me to Mongolian wrestling events and pop concerts. And very big thank you to **my close family** for your loving support throughout these PhD years.

In this introductory chapter, I explain how my research question emerged and evolved to focus on why lower-middle income countries participate in the growing phenomenon of international assessments. I clarify why I chose to respond to this research question with case studies of Lao PDR¹ and Mongolia's² participation in the UNESCO Institute for Statistics' (UIS) Literacy Assessment and Monitoring Programme (LAMP). Finally, I discuss how my research question responds to a literature gap in the emerging field of International Assessment Studies (IAS), and the purpose of this study.

1.1 Study genesis

In this section I explain how my research questions had their genesis in my UNESCO work experience but also in my previous studies and research.

My desire to focus on this particular area of research developed through a combination of my educational background, research interests and work experience. In particular, my research on reading patterns deepened my interest in literacy and led me to develop a research proposal (in 2009) on adult literacy to be pursued as a PhD research project. Before starting my PhD, I worked at UNESCO Headquarters in Paris for almost two years (2009 – 2010) in the Literacy and Non-Formal Education Section (within the Division for Basic Education). My UNESCO experience turned out to be a richly formative process through which I developed global educational knowledge but also came to share the human rights' approach³ to education, which UNESCO advocates globally.

¹ Though the official name is Lao PDR, which stands for Lao People's Democratic Republic, the exact official name is the People's Democratic Republic of Laos. It is often colloquially referred to as Laos. There is often confusion over the name of the country as some people call it Lao, which is the adjective describing a person from Lao PDR (also Laotian), the language, the culture and an ethnic group (one of the many) of Lao PDR.

² Formerly known as Outer Mongolia (until 1924) and then as the Mongolian People's Republic (1924-92), its official name is now Mongolia. Also a source of confusion may be 'Inner Mongolia' which is not part of Mongolia but actually an Autonomous Region of the People's Republic of China.

³ Also known as humanistic education, a human rights' approach sees education as everyone's human right, as opposed to an economic approach to education which sees education as a means to increasing national and personal economic growth. In advocating for a human rights' approach, the *UNESCO Global Literacy Challenge* states that 'Achieving basic literacy skills should not be seen as an end in itself but as a tool for active citizenship

My work experience at UNESCO increased my interest to research adult literacy as I slowly started to identify controversies in the Organization's educational development discourse. If I was finding a disconnect in the overarching discourse I was temporarily representing, how were the Organizations' Member States responding to it? There were two main tensions I had identified.

The first tension concerned the conceptualization of literacy and emerged as I was writing speeches⁴ for International Literacy Day (ILD). I was to use the 'shocking' literacy statistics (based on census data which in most cases is derived from a simple yes/no answer to 'can you read and write?') whilst at the same time UNESCO was advocating Member States adopt a more advanced understanding of literacy (based on the 2003 UNESCO definition of literacy) in their policies and practices⁵.

The second tension concerned the reasons for which the Organization values literacy. Although UNESCO promotes literacy for humanistic reasons (in line with its human rights approach to education), there were times when we had to use the 'economistic' approach to attract the attention of Member States. Not only does research poorly substantiate this causal relationship, but it is not in line with UNESCO's approach to education.

Sitting in the Paris office as a junior consultant, I wondered how UNESCO's contradictory discourse was being enacted in its Member State countries. Were they adopting a new approach to literacy as the Organization's definition had evolved, or were MS finding the dual definition-use difficult to work with? How were policy-makers combining the Organization's human rights and economistic approach in their literacy policy problem?

and a means to pursue other civil, political, economic or social rights. Those who can use literacy skills to defend and realize their legal rights have significant advantage over those who cannot. Through literacy, individuals obtain the means to participate politically in society. Relating literacy to human rights refers also to the content taught in the programmes. Literacy classes are places where learners, especially women, can be informed about their rights and can develop abilities to claim, defend and promote them.' (2008: 28).

⁴ On behalf of the UNESCO Director General and UN Secretary General.

⁵ This includes measuring literacy through direct testing, i.e. with the in-house developed Literacy Assessment and Monitoring Programme - LAMP.

My questions became more analytical and critical as I read literature on global trends in education and international educational policy⁶. These readings made me question whether and how global and local discourses in education were merging. I wondered how global and local actors were meeting and dealing with their internal inconsistencies and anticipated that my UNESCO experience was just an example of a wider phenomenon that was happening in many similar settings.

Furthermore, my readings in the New Literacy Studies⁷ combined with international work in literacy made me question the disconnect between the approaches to literacy. Another area that caught my attention was the disconnect between international literacy assessments and the NLS discourse on literacy: although international assessments claim to be measuring literacy based on an advanced understanding of literacy, the test instruments clearly measure literacy as a universal, standardized skill (Street 2013) versus the NLS understanding of literacy as a situated, plural concept (extensively discussed by Mary Hamilton 2001 and 2000, and Richard Darville 1999).

As we will see in the next section, my initial research questions evolved further both because I chose to use the Literacy Assessment and Monitoring Programme (LAMP) as a study case but also because my data generating process presented me with a more complex picture than foreseen.

1.2 Problem statement and research question discussion

Based on the above genesis of my research interest and the shortage of research on global - local encounters in education policy, I decided that adult literacy represented an interesting area in which to observe flows of global educational ideas (Henry et al. 2001) meeting with local ideas. I was keen to understand how a global organization's educational discourses were being received and enacted in different countries.

My initial research focus related to what Rizvi and Lingard (2010) describe as the vernacularization of global flows in national political, economic, cultural and historical

⁶ The main scholars who informed my early reflections are, in chronological order, Joel Spring (2009) on global education and international organizations; Lingard and Rizvi (2010) on international educational policy trends; and Steiner-Khamsi (2006) on international educational policy and travelling/localizing educational reforms.

⁷ The New Literacy Studies (NLS) were my first meeting point with the literacy problematic, back in 2008.

dynamics – or in Latour’s (2005) words the ‘localising moves and globalizing connects’ – and responded to Steiner-Khamsi and Stolpe’s (2006) call for an analytical exploration of the encounters between local and global forces. Responding to this call for exploration, I decided to observe the glocal interweaving of the literacy discourse at policy level, by focusing on how international literacy assessments contribute to changing the adult literacy policy discourse. Based on Verger’s (2014) argument to pay greater attention to the adoption moment⁸, I decided that in order to understand the localizing moves and globalizing connects, I had to focus on the rationales that make countries decide to participate in global programmes. The UNESCO Literacy Assessment and Monitoring Programme (LAMP) - also known as a policy initiative - offered an appropriate space for enquiry, as it is expected to ‘contribute to an enhanced understanding of literacy’ (*LAMP International Planning Report*: 4).

To understand to what extent the UNESCO global approach to literacy is adopted and mediated by the national political, economic, cultural and historical dynamics (Rizvi and Lingard 2010), I started by unpacking countries’ rationales for joining an international assessment programme hoping it would shed light on how the actors were engaging or resisting this glocal⁹ encounter. My first research questions were:

- How do global and local actors come together in global policy initiatives to reform national policy in practice?
- How do literacy policies reconcile global literacy discourses and national policy problems?

As I interviewed key policy actors at LAMP headquarters¹⁰ and in the Ministries of Education in Lao PDR and Mongolia, I found myself facing a more complex picture.

Informed by the UNESCO literacy rhetoric, I had assumed that countries needed and wanted better data to inform their adult literacy policies and that it represented the only way to measure if learning was occurring. Further, there appeared to be a lack of scholarly

⁸ Looking into what drives countries to adopt public-private partnerships in education, Verger (2014) states that we need to pay greater attention to the adoption moment to understand the ‘processes, reasons and circumstances that explain how policy-makers select, embrace and/or borrow global education policies’ (2014: 1).

⁹ This is a combined word which implies the meeting of the global and the local. Green (1999) uses the word ‘glocalization’ with the same meaning.

¹⁰ At the UNESCO Institute for Statistics, UIS.

understanding of the rationales of lower and middle income countries joining international literacy assessments.

It was not long before I found my interviewees were revealing an unexpected dimension of international literacy assessments which led my research questions to evolve into ‘why do lower-middle income countries join international literacy assessments?’

Through the analysis of my data, I unpacked this main research question into sub questions (as follows) to uncover the multiple rationales behind countries interest:

- How does LAMP construct and enact its policy identity? How is LAMP’s policy claim received in Lao PDR and Mongolia?
- How does LAMP deal with the tension¹¹ of valuing cultural diversity whilst at the same time standardizing literacy? How is this tension received and enacted in Lao PDR and Mongolia?
- How does LAMP’s ‘better data’ claim¹² play a central role in assembling countries? How is LAMP’s better data received and enacted in Lao PDR and Mongolia?
- How does LAMP provide international comparisons with high income countries whilst respecting cultural diversity? How is LAMP’s cross-country comparison claim received in Lao PDR and Mongolia?
- To what extent are countries interested in the process of participation as opposed to the international numbers¹³ they gain from LAMP?
- What strategies is LAMP data used for?
- How do opportunistic, unaccountable rationales complement the decision to join LAMP?

There is another reason why my research focus changed during the data gathering stage. I had initially set out to observe the local and the global meeting in adult literacy discourse *in practice*, and there was reason to believe the events I planned to observe would take place.

¹¹ This tension derives from the paradox of standardizing whilst at the same time giving value to diversity.

¹² LAMP promises it will provide ‘better data’ though this the word ‘better’ has multiple meanings (this malleable concept plays an important role in the LAMP assemblage by constituting a *language of convergence* – as seen in chapter five).

¹³ Data that is internationally comparable.

But LAMP did not progress in Lao PDR¹⁴ as foreseen¹⁵, which meant I found myself collecting data on a process that was happening so slowly that none of the events (meetings, trainings, collaborative working documents, etc.) took place whilst I was in Lao PDR, making it difficult to see the process ‘in practice’. My conclusion was that if I could not see the process as it developed, I had to analyse it in retrospect¹⁶.

At this point, Mongolia, an early adopter of LAMP and thus an enquiry context where I expected a greater availability of information, was included as a second context for enquiry. In 2012 (my data gathering year), Mongolia was at the latest stage of LAMP¹⁷ and was ready to carry out data analysis, dissemination and use of the data. Mongolia also failed to move forward during my available time (the UIS publishing of the data had been arranged for 2012 though in early 2014 it still had not happened) though it did have a history of LAMP implementation I could draw on. These constraints, which contributed to my research focus shift, will be discussed further in chapter three.

1.3 The research gap in emerging International Assessment Studies (IAS)

In this section I identify the emerging field of International Assessment Studies (IAS) and locate my research within it. I then discuss how my research question represents a gap in IAS, to explain how my research makes a distinctive contribution to this field. This is discussed in greater detail in chapter two, where I discuss the IAS literature which informs my research question and sub-questions and the discussion of my findings.

Researching what drives countries to join international literacy assessments rather than looking into how the global and a local literacy discourse merge has meant literature on international literacy assessments has acquired a central role in my research.

A vast literature has recently been published alongside the growth of international assessments dealing not only with the data produced and the programmes *per se* but also with the way such programmes have entered the educational space. I argue that this recent,

¹⁴ The country which had given me formal permission to carry out research on LAMP.

¹⁵ The activities I had planned to observe in 2012 started progressing at the end of 2013 and the pilot phase of LAMP was carried out in early 2014.

¹⁶ Once again, this was not available in the country I had gained access to and permission to do research in.

¹⁷ For details on a typical LAMP implementation schedule see chapter two.

extensive scholarly literature, growing out of multiple research traditions, is forming a new field of enquiry which I call International Assessment Studies (IAS). Research has been dealing with large-scale assessments since their appearance, but since the trend has picked up momentum in the last twenty years, scholars have produced a substantial number of publications discussing the phenomenon. IAS is thus a response to a significant moment in history which sees international assessments playing a central role in education and speeding up the globalizing of education. It is no longer surprising to read that Fenwick et al. (2014) argue in the latest Education Yearbook that these knowledge-based technologies and the comparative knowledge they produce have not only changed educational governance but become the process of governing.

Scholars in IAS deal with different aspects of international assessments which inform my research to differing degrees. Firstly, I have identified IAS literature which deals with the international assessment programmes *per se* and the politics of international assessments as these have informed the development of LAMP (whilst still representing the challenges the Programme faces). This area of IAS research examines conceptual and methodological challenges, especially those posed by the international nature of assessments. This subarea of IAS research is discussed in chapter two, alongside the introduction to LAMP. Another subarea of IAS research, which indirectly informs my research is secondary data analysis but also the effects on education of focusing exclusively on performance data.

Lastly, a subarea that has extensively informed my research enquires into the ways in which large-scale assessment programmes have entered governance¹⁸ and policy processes. Within this subarea there appear to be few empirical enquiries into the reasons that drive countries to join international assessments. I believe that a deeper understanding of how international assessments enter governance and policy, the growth of the phenomenon, but also national politics of reception, require uncovering government rationales for joining the assessment trend.

What has been written to date on government rationales for joining international assessments are mainly formal government or International Organizations' reports and working documents

¹⁸ As knowledge technologies play an important role in the shift from government to governance, understood as the institutions and relationships involved in the governing process (Pierre and Peters 2000).

which advocate the measurement of literacy and educational outcomes based on international benchmarks of quality, and for policy-makers to inform their policies with international indicators of literacy. This has left a lack of analytical studies in this area of IAS. In chapter two, I discuss the few and recent scholarly publications, mainly Grek (2009), Kamens (2013), Lockheed (2013), Wiseman (2013), that include a discussion on why countries participate in international assessments.

1.4 Purpose of this research

Having identified a research gap in the field of International Assessment Studies, I believe that understanding why lower-middle income countries join international assessments and the uses anticipated through the participation in the global educational trends, will have implications for the development of such programmes, the uses of such knowledge technologies, and the politics of reception of the data and league tables. The findings of this research may also have implications for the participation of lower and middle income countries in other international educational trends.

I believe that understanding the reasons why lower-middle income countries join international assessments is even more important¹⁹ at a time when the international assessment trend appears to be growing (with PIAAC calling for low and middle income countries to join²⁰ and PISA seeing the establishment of PISA for Development²¹). Thus my research could not be more timely in responding to the developments in the field of international assessments and the inauguration of IAS as a new field of study. The complex understanding of the rationales for participation may affect the development of international assessments for lower-middle income countries in relation to the need to develop more policy-valuable data.

This research may help shed light on the process of standardization and convergence discussed by different schools of thought (i.e. World Culture Theory, Culturalists and Globally Structured Agenda for Education). Although international assessments are feared to be having a

¹⁹ Especially when the results may be comparatively 'shaming' (Lehmkuhl 2005) and government officials are aware of the biased effects created by international assessments being a Western conception (as discussed in chapter two).

²⁰ As stated on the OECD website at <http://www.oecd.org/site/piaac/joinpiaacin2014.htm> - accessed on 25/03/2013.

²¹ As stated on the OECD website at <http://www.oecd.org/pisa/pisafordevelopment/> - accessed on 25/03/2013.

uniforming impact on education around the world, the findings in this research suggest the dynamics are more complex (i.e. convergence at policy talk level rather than in practice as suggested by Steiner-Khamsi and Stolpe 2006).

1.5 Why LAMP? And why Lao PDR and Mongolia?

In this section I explain my choice of a study case of LAMP in Lao PDR and Mongolia, although I give a more comprehensive introduction to the Programme and my contexts for enquiry in chapters two and three.

In the first year of my PhD, I considered the choice between a case study of the UN Literacy Decade (UNLD) initiative 2003 - 2012 (which I worked for in 2009 and 2010) and LAMP – both being UNESCO initiatives to which I had access through former employment. After careful analysis, I favoured LAMP as I assumed its ‘transfer of knowledge and capacity building’ element would allow me to observe the mechanisms of global and local knowledge flows merging i.e. the understanding of literacy transformed into hybrid glocal knowledge.

I was also interested in LAMP being the first case of an international assessment developed specifically for lower and middle income countries (with a great variance in terms of scripts, languages and cultures) (Guadalupe and Cardoso 2011, Maddox 2014).

LAMP is a numeracy and literacy test (testing reading skills except for one test item in which testees need to write) which randomly selected individuals (15+) sit in order to produce statistics on their levels of literacy and numeracy competences ranging from level 1²² (poor literacy) to 5 (fully proficient). Conceived in a similar way to the International Adult Literacy Survey, IALS (formerly the Adult Literacy and Lifeskills Survey, ALL) and based on IALS methodology and a number of IALS test items, LAMP differs from IALS for four main reasons. Firstly, LAMP was developed in order to give greater consideration to cultural and linguistic diversity; secondly, UNESCO’s respect for diversity implies not ranking countries by outcome scores; thirdly, participating countries were asked to contribute to the development of the testing items to allow for greater context adaptation of the test instruments; and lastly, the Programme’s transfer of skills and capacity building aimed at enhancing the understanding of literacy. LAMP can be seen as the OECD’s Survey of Adult Skills (PIAAC) for lower and middle

²² In 2013 this changed as the two lowest levels were merged.

income countries (before the OECD started courting lower and middle income countries to participate in PIAAC in 2012 with WB funding).

In the first ten years of its life, LAMP was carried out in few countries²³ since the first round of countries entered as pilot countries contributing to developing the Programme. With its first seeds planted in 2003 (the idea of LAMP was put forward at a meeting at UNESCO in Paris²⁴), by 2014 LAMP had seen ten countries (Mongolia, Jordan, Palestine, Paraguay, Kenya, Morocco, Niger, Viet Nam, El Salvador and Lao PDR – this latter country in early 2014) carry out the pilot test, of which four countries (Jordan, Mongolia, Palestine, and Paraguay) then completed the main assessment²⁵.

This meant there were a limited number of countries²⁶ for me to choose from for my fieldwork. This was combined with a strong preference for the Asian region, both for research and personal reasons²⁷. The choice of the Asian region implied Mongolia and Lao PDR²⁸ (two of the

²³ As will happen with PISA for Development, which will be initially implemented in five pilot countries.

²⁴ 'There is a perceived need for better statistical data on literacy leading to a deeper understanding of literacy acquisition and practice. A considerable amount of research and effort has already been undertaken by a number of institutions to develop literacy, assessment methodologies which lead to reliable data. A number of methodologies have been developed and tested, as well as national surveys conducted. These methodologies served as starting points for the discussions of the meeting. This meeting's aim was to develop a conceptual framework and an operational definition of literacy for literacy assessment and contribute to a major literacy assessment programme 'Literacy Assessment and Monitoring Programme' (LAMP), initiated by UIS in 2003.' (UNESCO, 2005: 3).

²⁵ In March 2013 another six countries had engaged in the initial processes of LAMP – the six countries are Lao PDR, Namibia, Afghanistan, Jamaica, Nigeria and India.

²⁶ Only Lao PDR, Mongolia and Vietnam. This latter was not open to my research and did not grant me permission to carry out research in Vietnam.

²⁷ For research reasons, I find it particularly interesting to research literacy and global trends in education in a region where the economies are seeing a burst of productivity and growth, and the governments are thus rapidly having to adapt in terms of education and the new capital of human resources. For personal reasons, I have an interest and greater knowledge of the Asian context compared to the African, South American and Arab region, which I developed through travels in Asia (China, Vietnam, Hong Kong and Singapore over the last fifteen years). Secondly, I valued the sense of physical safety (which I have always felt when travelling alone in Asia) since my data gathering required extensive periods alone in Lao PDR and Mongolia. Finally, I have an interest to research countries where less international development research has been carried out (compared to India for example). Lao PDR sees very little research being carried out both by local and foreign researchers and Mongolia has only

three countries involved in LAMP in Asia), as national contexts to observe LAMP-related developments. I was enthusiastic about these two very different contexts of enquiry as they are both involved in LAMP, whilst having a very different literacy situation to measure. Lao PDR and Mongolia are very different and have apparently very little in common, though suffice it to scratch the surface to find a number of interesting parallels (as seen in chapter three).

1.6 Clarifying concepts

In this section I clarify a number of concepts and terms I refer to throughout the thesis, since they may not have the same meaning for my readers and for scholars from other disciplines. To prevent confusion and to avoid misunderstandings, I will briefly outline the meaning I attribute to: literacy, international assessments and international *literacy* assessments, literacy rates and levels, policy, countries, and lower-middle income countries.

A term which may create confusion is **literacy**, as it is increasingly used with a variety of differing meanings. In this thesis, I am not using literacy with its most simplistic use the ability to read and write nor its increasingly common use of ‘-literate’ to indicate the ability to make sense of a specific area (i.e. computer-literate). I use literacy to denote the uses individuals and their valued communities make of the written word, thus attributing it a local, contextualized and plural meaning (Barton et al. 2000). I will discuss (in chapter two) the debates and tensions between this latter understanding of literacy and its conceptualization in international assessments, which claim to base their understanding of literacy on the latest UNESCO definition written in 2003 for measurement purposes:

Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve his or her goals, develop his or her knowledge and potential and participate fully in community and wider society. UNESCO 2008: 18

Measuring literacy by directly assessing individuals’ literacy competences rather than indirectly with the use of the census question (‘Are you literate?’, or ‘Can you read and write?’) implies moving away from dichotomous **literacy rates** which divides populations into literates and

recently seen an increased interest in research, coinciding with its GDP mining-boom.

²⁸ Both very closely settled aside the major Asian economy: China.

illiterates, to quantifying individuals' **levels of literacy** competence along a continuum of competence from poorly literate to proficiently literate (as measured by international literacy assessment programmes).

My research specifically focuses on **international literacy assessments**, though I often refer to **international assessments** which include the assessment of adult literacy skills but also other large-scale skills assessments. The main differences between international assessments and international literacy assessments is the age focus. The former are carried out in schools and represent a measurement of the learning quality educational systems are capable of producing in terms of literacy and numeracy. They are also considered a prediction of the quality of the human resources an educational system is producing, soon to be available on the labour market. International *literacy* assessments focus on the literacy and numeracy skills of youth and adults (LAMP targets 15+ whilst PIAAC targets 15 to 65 year olds with a clear focus on the 'working age' population) with random samplings in households (rather than in schools). International literacy assessments thus represent the quality of learning in educational systems in retrospect (though it is more difficult to assert such connections as other factors contribute to literacy and numeracy levels over a lifetime) but they do represent (as far as one believes the concept of human resources and the adequateness of the measurement instruments) the availability of human resources by levels of skills. It must also be stated that although international assessments of students in schools also test literacy, I refer exclusively to adult literacy assessments when I use the term 'international *literacy* assessment'.

Policy is used with such versatility of meaning that it is important to clarify what meaning I attribute to the word in this research. In this thesis, the meaning attributed to policy is informed by Ball's conceptualization of policy as 'both text and actions, words and deeds, it is what is enacted as well as what is intended' (Ball 1994: 10) and Easton (1953) who adds that policy is as an authoritative allocation of values. This is further developed by Rizvi and Lingard, who describe such values as being 'ordered, organized and enacted in a particular policy configuration' (Rizvi and Lingard 2010: 73). These understandings of policy are helpful in the understanding of international assessments to inform policy.

In this thesis I often refer to **countries**, a rather vague term which I use to include an array of actors which include policy-actors and government functionaries but also government

institutions (a ministry, the statistical office, the prime minister or president, and so on) who represent the country and are part of the LAMP process.

Considering the development of LAMP, but also PISA for Development, which focus on **lower and middle income countries**, I have chosen to adopt this classification for clarity (this does not imply that I value this categorization). This is a World Bank classification²⁹ based on gross national income per capita which divides countries into four categories: low income countries (1,035USD or less), lower-middle income (between 1,036USD - 4,085USD), upper middle income countries (4,086USD - 12,615USD), and high income countries (12,616USD or more). Both Lao PDR and Mongolia belong to the *lower-middle income category*, though they are considerably different and at different stages of economic development. Another 46 countries³⁰ are part of the same category as Lao PDR and Mongolia.

1.7 Thesis structure by chapters

In this section I outline the subject of each chapter. In chapter two I provide a short history of international assessments, followed by a discussion of the programmes' challenges and the politics of these programmes, as discussed in scholarly debates. I then give a short introduction to UNESCO before describing UIS and its LAMP. In this chapter I also discuss relevant scholarly discussions on international educational policy and International Assessment Studies, before looking more closely into research on why countries join international assessments.

In chapter three I discuss my research methodology, introducing the two case study contexts but also the methods of research, the role of trust in data gathering, my role as an investigator and what I imply by meaningful data. In chapter four I discuss a more theoretical methodology by introducing the assumptions and concepts of Actor-Network Theory that frame my research design and analysis.

²⁹ Information from the World Bank website <http://data.worldbank.org/about/country-classifications> accessed on 25/03/2014.

³⁰ They are Armenia, Bhutan, Bolivia, Cameroon, Cape Verde, Congo Republic, Ivory Coast, Djibouti, Egypt, El Salvador, Georgia, Ghana, Guatemala, Guyana, Honduras, Indonesia, India, Kiribati, Kosovo, Lesotho, Mauritania, Micronesia, Moldova, Morocco, Nicaragua, Nigeria, Pakistan, Papua New Guinea, Paraguay, Philippines, Samoa, São Tomé and Príncipe, Senegal, Solomon Islands, Sri Lanka, Sudan, Swaziland, Syria, Timor-Leste, Ukraine, Uzbekistan, Vanuatu, Vietnam, Palestine, Yemen and Zambia.

In chapter five and six I discuss my data analysis. The former chapter focuses on the claims which LAMP makes to justify participation in the Programme and how these are constructed at UIS, in Lao PDR and Mongolia. Chapter six discusses what drives countries to participate, that LAMP does not claim to provide. In chapter seven I discuss this study's conclusions and questions for further analysis which have emerged from this research.

This chapter is structured in two parts. In the first part, I look into the history and development of international assessments. This leads to a discussion of the dominant discourse of literacy enumeration as opposed to the social practice approach to literacy, and includes scholarly debates on the politics of international assessments. This first part also explores the methodological and conceptual challenges which international assessments confront. I then introduce and discuss the Literacy Assessment and Monitoring Programme (LAMP, the Programme at the centre of this study) and LAMP's mother Organizations: UNESCO and the UNESCO Institute for Statistics.

In the second part of the chapter, I situate my research on international assessments within the recent scholarly discussions in the fields of research that inform and relate to my research questions and data analysis, whilst also identifying questions which have not yet been engaged with in a scholarly, empirical manner. After positioning my research in the wider field of international education policy with a focus convergence theorists and culturalists, and on policy borrowing and lending, I recognize and discuss the relevance of the emerging field of International Assessment Studies for my enquiry, with a focus on the role of international data on policy processes. Finally, I look into the little research available on the rationales that drive lower and middle income countries to join international literacy assessments and other global trends in education. These discussions resonate with the analysis of my data and will be drawn on in chapter five and six.

2.1 International assessments – a history and the politics of international assessments

Headings 2.1 and 2.2 of this chapter structure the relevant scholarly literature into two parts. This first part introduces international assessments and the politics of international number production.

2.1.1 A brief history of international assessments

In this section I give a brief overview of the development of the international assessment trend, from the earliest 'studies' (as they were referred to before the term 'assessments') and the move away from literacy measured as a dichotomy. I then give an overview of the main international assessments which have influenced the development of LAMP, but have also

played a significant role in making international assessments acquire such a significant role in education.

Throughout the last two centuries (Maddox 2007) literacy has been measured in a dichotomous manner (which assumes one is either literate or not) by asking (not testing) individuals³¹ either 'Are you literate?' or 'Can you read and write?' and offering only yes/no as possible answers. Although literacy measured as a dichotomy has historical value for longitudinal evolutions, it is a subjective measure based on individuals' understanding of literacy thresholds (not reported in the survey answers) which has little scientific value:

There is a growing consensus that dichotomous measures of literacy based on the 'literate and illiterate' distinction should be replaced by more nuanced and accurate forms of literacy assessment. The dichotomy, it is argued, over-simplifies the analysis, does not capture the range and plurality of literacy practices and abilities, and is a source of prejudice (Street, 1995). The desire to abandon dichotomous measures is supported from contrasting disciplinary and institutional perspectives (Street, 1995; Boudard and Jones, 2003), and has the support of policy institutions (UNESCO, 2008).

Maddox and Esposito 2011: 1

The move away from the dichotomous model has been accompanied by the appearance of international assessments tests which directly measure levels of literacy.

Over fifty years ago, the International Association for the Evaluation of Educational Achievement (IEA) conceptualized and tested a framework to carry out national large scale assessments, which was used in the First International Mathematics Study (FIMS), the Second International Mathematics Study (SIMS) and the Trends in International Mathematics and Science Study (TIMSS). These studies were used to assess students' abilities in problem-solving based on national curricula (Owen 2013), before turning toward international assessments of science, reading and Maths (Howie and Plomp 2005). Owen (2013) recounts that international, regional, and national agencies contributed to the development of international assessments in order to measure educational quality, diverging between the IEA curricula-based assessments and the OECD skills and competencies-based assessments.

³¹ Often a member or head of a household is asked to define the household occupants' literacy or illiteracy status.

National literacy assessments had been developing extensively, especially in North America³² where the Adult Performance Level Study (APL) was carried out in 1975 by the U. S. Office of Education in order to evaluate reading, writing, numeracy and problem-solving. The Young Adult Literacy Assessment (YALS) was carried out in 1986; the Canadian Survey of Literacy Skills Used in Daily Activities (LSUDA) was carried out in 1990, in English and French; the Survey of Workplace Literacy was carried out in 1992; and the National Adult Literacy Survey (NALS) was carried out in 1992; before these national assessments saw a shift to international assessments. Thorn (2009) states that the work of the US-based Educational Testing Service (ETS) and Statistics Canada set the example of what could be measured with the YALS and the NALS by combining ‘advances in psychometrics, reading theory and large scale assessment with household survey methodologies’ (2009: 5) and that the LSUDA proved that large scale assessments like the YALS and NALS could produce comparable data across languages.

Initially, the founders of IEA were against direct, micro (this includes student performance) comparisons of national educational systems which they understood as unique to their cultural and historical developments, even though they deemed that macro comparisons were possible (i.e. the effects of comprehensive education). A few decades later, national educational systems were no longer seen as uniquely national projects, but as part of a world project. From the Seventies onwards, the concept of international comparisons of educational performance and skills had become widely accepted as valid, and became coupled with the international search for best practices (Kamens 2013).

A similar evolution occurred at the OECD, the main advocate for international education indicators and the administrating organization of the main international assessments. Initially there was distrust at OECD towards the development and use of international performance indicators, although pressure from the USA and France meant that OECD established the International Indicators and Evaluation of Educational Systems (the INES project) in 1988. Henry et al. state that in the 1990s the OECD ‘saw some remarkable shifts in the development of education indicators within the OECD: from philosophical doubt to statistical certainty; from covering some countries to covering most of the world; from a focus on inputs to a focus on

³² As early as 1916, immigrants arriving in New York State were asked to carry out the *Literacy Test*, as a form of screening and rejection.

outputs' (2001: 90). It must also be said that in the case of PISA, the Programme grew out of a USA domestic educational crisis and the geopolitical situation following the Cold War.

International assessments are partly a response to theoretical and conceptual advancements (as we shall see in more detail below with the New Literacy Studies), but are also considered the most appropriate way to measure learning outcomes (this is based on a shift in educational values from access measured on enrolment rates to quality measured in ability to use skills). International commitments and agreed frameworks for educational development³³ increasingly refer to quality education and the need to measure the actual learning of literacy, numeracy, and life skills. These international frameworks recognise that context diversity makes it difficult to measure performance and to compare indicators (Dakar Framework for Action 2000).

2.1.1.1 International Assessments - from IALS, via PISA to PIAAC and PISA for Development

In this section I briefly introduce the international assessments which are part of the international assessment trend, by giving an overview of LAMP's predecessors: the International Assessment Studies (IALS) and the International Adult Literacy and Life Skills Survey (ALL), in addition to the latest adult literacy assessment Programme for International Assessment of Adult Competencies (PIAAC). This section would not be complete without a presentation of the Programme for International Student Assessment and LAMP's new look-alike, PISA for Development. This section describes what appears as a universe of international assessments with the administering agencies courting governments to participate, with the aim of having as many countries as possible measured on the same scale (as discussed in chapter six, the numbers of participating countries are part of the 'validation' of the international numbers).

The International Adult Literacy Survey (IALS) was the first international assessment of literacy which was developed to compare prose, and measure document and quantitative literacy skills of 16 to 65 year olds (exclusively focusing on the working age population) across 22 countries³⁴

³³ The latest international framework for action, the *Belem Framework for Action* (2010), specifically address the need to develop comparable indicators to measure literacy as a continuum.

³⁴ The first round in 1994 included Canada, France, Germany, Ireland, the Netherlands, Poland, Sweden, Switzerland, and the USA, followed by Australia, Flemish Belgium, the UK, New Zealand and Northern Ireland in

between 1994 and 1998. Grek (2014) suggests that the IALS established a new theoretical logic for the OECD's measurement framework, and developed a set of assessments tools to be carried out as a household survey. This was based on advanced psychometric methodology to measure and provide reliable literacy data across cultures and languages for the first time.

Continuing a history of national literacy assessments (as seen above), North America went on to lead international assessments. As Grek (2012) points out, the IALS was predominantly administered by North American Agencies: Canada Statistics, the Educational Testing Services (ETS) and the National Centre for Education Statistics (NCES). It was not exclusively a North American project, as it was led by the OECD, also in collaboration with the EU and UNESCO.

Grek argues that IALS 'created fertile ground for the OECD to push its education policy agenda through measurement and comparison' (2012: 78) and to provide internationally comparable, scientific indicators for policy. Grek argues that the OECD has become instrumental by establishing 'first, the problematization of specific issues (a common language for the participant countries, research agendas, other IOs and ultimately, the public); second, their institutionalization (the creation of a consensus of all those involved on priorities and necessary policy directions); and third, their legitimation (it created evidence on the basis of which education reform could be justified)' (2012: 78).

Although the IALS was met with extensive scholarly criticisms, the OECD went on to develop the IALS further and was renamed as the International Adult Literacy and Life Skills Survey (ALL), stating it had been developed to include a wider range of skills and improved assessment methods. The International Adult Literacy and Life Skills Survey (ALL) measured prose and document literacy, but also numeracy and problem solving skills. It was implemented between 2002 and 2006 and carried out in twelve countries³⁵.

Although IALS and ALL initiated interest in international assessments, the 'star' of all the international assessments is PISA – the Programme for International Student Assessment. PISA

1996 and Chile, the Czech Republic, Denmark, Finland, Hungary, Italy, Norway, Slovenia and the Ticino in Switzerland in 1998.

³⁵ Canada, Bermuda, Italy, Mexico, Norway, Switzerland, and then USA took part in 2002 and Australia, Netherlands, New Zealand, Korea, Hungary took part in 2006.

was initiated in 1997 and carried out in an increasing number of countries every three years³⁶ to measure the ability of 15 years olds to apply everyday skills and competences. It was designed and developed within a policy framework (Grek 2014) to meet the needs of policy actors and has become a widely used tool for national educational policy, to the extent that Gorur has suggested PISA is 'a modern day Delphic Oracle which governments consult to obtain policy direction' (2011: 77). As PISA increases its global and far-reaching effects in education, Sellar and Lingard argue that PISA has expanded its scope (what it measures), its scale (how far it reaches across the globe) and its explanatory power (informing policy makers about what works) (2013: 192).

The global success of PISA and its successful influencing of national educational reforms and agendas (Sellar and Lingard 2013) are not the only factor behind the development of PIAAC (previously IALS and ALL) for workforce skills. Grek suggests that the growth of international literacy assessments from the early Nineties has built upon 'an evolving and progressing consensus based on the construction of policy knowledge and crucially, statistical knowledge, in education' (2012: 89).

The Programme for the International Assessment of Adult Competencies (PIAAC), powered by the success of PISA (Grek 2012), has evolved from IALS and ALL to adapt to recent changes to the structure of the economy, thus measuring individuals' problem-solving skills in technology rich environments (ICT and Internet skills), further to a combination of prose and document literacy, reading components and numeracy. PIAAC also measures individual persistence and self-discipline, in addition to how testees feel and behave in relation to social and cultural engagement, political efficacy, and social trust, as part of a more complex understanding of human capital and its potential (Sellar and Lingard 2013). This does not imply a shift towards a more humanistic approach to skills and competencies, but a more complex economic understanding of education and knowledge (Grek 2012) or a human capital approach which includes social concerns (Evans 2013).

PIAAC, more recently known as the Survey of Adult Skills, was implemented in 24 countries³⁷ (two thirds of which were European) in its first round in 2008-2012 (results published in 2013).

³⁶ PISA was implemented by a total of 75 countries in 2009/2010 and 64 countries in 2012. For a full list of countries by year of implementation see <http://www.oecd.org/pisa/participatingcountriseconomies/>

³⁷ First round PIAAC countries are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland,

A second round of PIAAC³⁸ is being implemented between 2012 and 2016, with the OECD calling for middle and low income countries to join (as the OECD promises to support countries in their search for external aid to cover the costs of PIAAC implementation).

The OECD justifies the development and implementation of PIAAC as a way to allow countries to relate competency levels to individual and aggregate economic and social outcomes (i.e. participation in lifelong learning, economic growth, etc.), and to identify educational systems and policies which lead to high performance. PIAAC aims at providing countries with the tools to measure differences in key competencies against countries (i.e. reference societies or economic rivals) and 'assess where they stand in terms of quantity and quality of the knowledge and skills of their workforce' (Grek 2012: 84), which based on my interviews, seems to be a main area of concern for middle income countries.

Other international assessments that also play a central role in this global phenomenon are the Trends in International Mathematics and Science Study - TIMMS (for fourth and eighth grade students) and the Progress in International Reading Literacy Study - PIRLS (fourth grade literacy test) which are international curriculum-based tests for children in school. In 2011, PIRLS was implemented by 49 countries and 9 benchmarking participants, whilst TIMMS was implemented by 63 countries and 14 benchmarking participants.

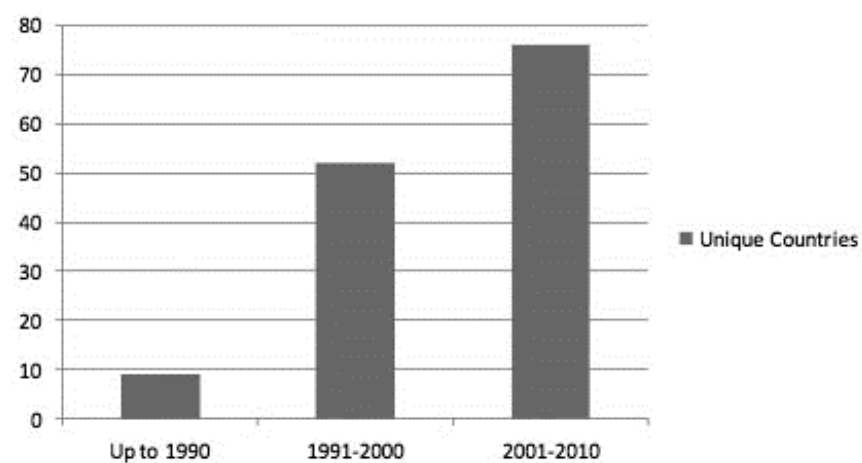
From Kamens and Benavot's 2011 study of national and international assessments, it appeared that in 2009, 61.95% of countries were involved in national assessments (with a greater number of low income countries doing national assessments) whilst only 29% of countries were involved in international assessments. Lockheed (2013) suggests low and lower-middle income countries have only recently shown interest in international assessments (5% of developing countries joining the very first international assessments in the Seventies and Eighties). The numbers picked up in the 1990s with the financial and technical support of donors (in particular, the World Bank, OECD, the United Nations Development Programme (UNDP) who were concerned with evidence of aid effectiveness) for low and middle income countries joining PISA, TIMSS, PIRLS, but also regional assessments, such as the Southern and

France, Germany, Ireland, Italy, Japan, Republic of Korea, Netherlands, Norway, Poland, Russian Federation, Slovak Republic, Spain, Sweden, United Kingdom and United States.

³⁸ In Chile, Greece, Indonesia, Israel, Lithuania, New Zealand, Singapore, Slovenia and Turkey.

Eastern Africa Consortium for Monitoring Educational (SACMEQ) and the *Programme d'Analyse des Systèmes éducatifs des États et gouvernements membres de la CONFEMEN*³⁹ (PASEC). Figure 1 illustrates how low income countries have seen an incredible rise in national assessments over the last two decades.

Figure 1 – The rise of low and middle income countries participating in international large-scale assessments, pre-1990 to 2010. Reproduced⁴⁰ from Lockheed 2013.



Lower and middle income countries are now being offered more financial support to join PIAAC and PISA for Development (since 2013, on the OECD's website). This makes the phenomenon of international assessments a rapidly changing one, as lower and middle income countries become the new targets of international assessments⁴¹.

Further to these international assessments, the OECD terminated a feasibility study in 2012 of the Assessment of Higher Education Learning Outcomes (AHELO). The feasibility study assessed scientific practicality and scientific feasibility in order to measure the knowledge and skills of university graduates in general skills, economics and engineering. The intention was once again to measure across cultures, contexts, and languages and included the participation of lower and middle income countries (which also participated in the feasibility study).

³⁹ Translation: the Programme for Analysis of the Educational Systems of the States and government members of CONFEMEN.

⁴⁰ With permission from Benavot in September 2013.

⁴¹ See the OECD's blog on reaching out to Sub-Saharan Africa and other lower income countries: <http://oecdeducationtoday.blogspot.fr/2014/03/expanding-pisas-circle-of-influence.html>

2.1.2 What does it mean to count literacy? Moving away from literacy as a social practice

In this section I discuss the two main approaches to literacy, one that sees literacy as a social practice (New Literacy Studies) and the other as a quantifiable, ordered practice. I then discuss scholarly debates on the politics of international assessment regimes which influenced LAMP when it tried to redefine itself, in tune with '*its true purpose*'⁴² (as we shall see in my interview analyses in chapters five and six). The reason why I discuss the debates on counting literacy is because the development of LAMP attempted to account for these criticisms by becoming more sensitive to local, everyday literacies.

With the growing policy reliance on evidence and statistical indicators, literacy is increasingly conceptualized as a universal skill and a numerical fact. International literacy assessments have played a crucial role in this reconceptualization shift.

Quantifying literacy is a problematic issue, especially in light of the way literacy is conceptualized in New Literacy Studies (NLS). Extensive research in literacy (see Street 1984; Gee 2000) has conceptualized literacy as a social practice (known as the 'social practice theory') which implies literacy cannot be understood separately from its social, cultural, and institutional context of practice (Hamilton 2001). NLS argue that literacy is a plural concept which is historically and culturally embedded and situated in social structures involving individuals' 'social relationships, values, attitudes, and feelings' (Barton et al, 2000: 5). Figure⁴³ 2 summarizes the main understandings of literacy that have emerged through theoretical and empirical research in NLS.

Figure 2. Reproduced from Barton et al. 2000.

- Literacy is best understood as a set of social practices; these can be inferred from events which are mediated by written texts.
- There are different literacies associated with different domains of life.
- Literacy practices are patterned by social institutions and power relationships, and some literacies are more dominant, visible and influential than others.
- Literacy practices are purposeful and embedded in broader social goals and cultural practices.
- Literacy is historically situated.
- Literacy practices change and new ones are frequently acquired through processes of informal learning and making sense.

Although international assessments no longer count literacy as a dichotomy (literate and illiterate), but measure literacy along a continuum of literacy skills, the way literacy is constructed in the international literacy testing instruments remains at odds with the social practice theory of literacy, which argues against the existence of autonomous literacy, which is understood as a universal, isolated skill.

Although UNESCO's 2003 shift to literacy, conceptualized as a continuum, showed an increased awareness and an interest to accommodate the scholarly debates of the complexity of literacy discussed in the New Literacy Studies, the Organization's reconceptualization of literacy as a continuum does not do justice to the social practice theory of literacy, as literacy is once again seen as a 'thing' that can be distributed along a linear scale. The hyper-diversity of literacy practices (Hamilton, 2013) would prove difficult to place on a continuum from poor literacy to proficient literacy skills (omitting the complexity of literacy practices). UNESCO's literacy conceptualization places counting literacy once again at the forefront, with the result of reproducing a more complex dichotomous paradigm than the simple dichotomous paradigm being rejected. Measuring literacy in a globally comparative way, but also in a context-specific practice, is conceptually contradictory.

The first large scale adult assessment, the IALS, states in the main report (OECD 1995) that the literacy definition upon which the IALS is built recognises the embedded nature of literacy in everyday life and the variety and complexity of literacy activities that people engage with within the countries studied. Street (1996), Levine (1998) and Darville (2001), argue that this understanding of literacy 'only pays lip service to a social practice account and is at odds with the approach actually taken in operationalising the study' (2001: 381).

Street (2013) argues that both PISA and the UNESCO annual publication on the Education for All goals (the *Global Monitoring Report*) are still applied as an autonomous literacy model in measuring and discussing literacy and learning. Street (2013) argues that international agencies still apply the dominant theory of literacy as an autonomous skill in a way that is inadequate to cope with the complexity and local meanings of a socio-culturally embedded practice. Blum et al. (2001) highlight the lack of literacy specialists in the design of international literacy tests, which appear to have ignored the social practice literacy theory (Grek 2012).

Two main arguments, drawing on the New Literacy Studies, have been put forward on the politics of international assessments (one of the sub-areas of International Assessment Studies mentioned in chapter one). Firstly, it is argued that literacy is culturally embedded and cannot be measured as a universal, decontextualized skill. Secondly, it is argued that international assessments narrowly measure and construct a dominant form of literacy, as opposed to the plurality of literacies which individuals use depending on the purposes and contexts of literacy practices. As we shall see in this chapter and in chapter five, LAMP's intention to account for these criticisms (by making its testing instruments context specific and closely related to everyday uses of literacy) contrasts with the Programme's need to standardize literacy in the name of international comparisons.

Darville (2001) argues that the dominant literacy discourse, as institutionalized by the IALS, is based on the skills theory which sees literacy as a set of decontextualized skills or as 'a set of information-processing cognitive skills' (2001: 379) that are 'tailored specifically to policy making for adult literacy within the developing "competitiveness" of global capitalism (with its rapid changes in both markets and methods of organizing production)' (Darville 2001: 2). The absence of literacy is treated as a deficit (Rogers 2011) and seen as damaging for the nation (Hamilton and Pitt 2011).

Lingard argues that research needs to begin by recognizing that 'data in policy and research are made, fabricated – not in the sense of falsified, but in the sense of constructed, put together' (2014: 46). So how is literacy quantified? In *Literacy and the Politics of Representation*, Mary Hamilton (2012) uncovers the process of transforming the complexity of literacy into facts and figures which now dominate public discourse. Hamilton argues that the development of numerical representations through the application of the 'sophisticated technologies of measurement' (2012: 33) makes us 'see literacy as a thing, that can be ordered and classified, and thus measured' (ibid.). Hamilton argues that experiences are classified into categories that 'carry normative judgments as knowledge is organized for practical purposes. As they become naturalized within everyday practice, the processes, techniques and decisions through which they are constructed, become hidden from view or black boxed' (2012: 14). Institutional activities manage to 'impose order on the disorderly flow of social life, creating knowledge that eventually becomes unquestioned truth' (Hamilton 2010: 68). Drawing on Nespor (2002), Fenwick and Edwards argue that tests 'embed a history of network constructions, struggles

and mediations which have settled into one fixed representation' (2014: 45). The complexity of literacy as a social practice, extensively studied in NLS, is translated and ordered through the 'sophisticated technologies of measurement' (Hamilton 2012: 33) of international literacy assessments into measurable facts and figures which can be managed by governments and which now dominate global educational discourse (Hamilton 2012). The simplicity and usability of literacy conceptualized through numbers has changed the way literacy is understood and is enacted in policy. It has become a universally spoken language.

The concept of governmentality has been extensively used in scholarly discussions of the politics of international assessments (Hamilton 2001, Fenwick et al.2014, Nóvoa and Yariv-Mashal 2014). Gorur (2011) and Atkinson (2013) have applied the concept of governmentality to identify how the numbers of international assessment act as a technology of educational governance, which supports Rose's (1999) understanding of legitimacy acquired through the technology of numbers. With the advent of IALS and drawing on Foucault's understanding of governmentality, Hamilton (2001) argued that international literacy assessments create and institutionalize an international regime of truth around the meaning of literacy, by determining what counts as literacy (Hamilton 2012). Thus international assessments create an institutionalized, dominant literacy discourse that devalues and marginalizes all other self-generated, vernacular literacy practices and discourses.

Barton (1994) argues that the institutionalization of dominant literacy and knowledge (which are actually Western literacy practices) have the power to crush local literacy users who are seen as backward (even though they actually have, and use, equally valuable local knowledge and practices) and oppose the diversification of literacy (which would see more languages and varieties gaining greater written use).

The vernacular literacies we identified are those that have their origins in the purposes of everyday life but are not regulated, codified or systematised by the explicit rules and procedures of formal social institutions. Whilst many vernacular literacies are influential and valued in people's day-to-day lives, they are also ignored in education. They do not count as 'real' literacy and neither are the informal social networks that sustain these literacies drawn upon or acknowledged. They are not highly valued by formal educational institutions, although they exist in dialogic relationship to these institutions. We defined dominant literacies as those associated with formal

organisations, such as the school, the church, the work-place, the legal system, commerce, medical and welfare bureaucracies. They are part of the specialised discourses of bounded communities of practice, and are defined, codified and standardised in terms of the formal purposes of the institution, rather than in terms of the multiple and shifting purposes of individual citizens and their communities.

Hamilton 2001: 179

Hamilton (2010) suggests that through the choice of test items, IALS solidifies dominant literacy values, which Darville (1999) and Hamilton and Barton (2000) argue are constructed and defined within the global neo-liberal paradigm. They also argue that such assessments are 'driven by the search for universals in the relationships between literacy, education and prosperity which can be used to further the goal of global development' (Hamilton and Barton 2001: 378):

Selecting, transforming and recontextualising the everyday texts, decisions are made as to which aspects of literacy are salient to test, and which are not; which aspects of literacy are regarded as vernacular and local, and which are regarded as universal and desirable. Each final item is a consequence of a network of sources, theories, cultural and institutional assumptions, technologies, social practices and institutional procedures.' Not only is the choice of 'every day literacy practices biased, but 'testees can only respond in tightly scripted ways (or transgress by not responding) and they have no agency to define what literacy might mean to them. Adults' self-assessments, although recorded are down-graded in relation to the objectivity of the test.' Hamilton 2001: 187

Hamilton and Barton conclude IALS is just another literacy measurement proxy that is an artificially constructed literacy that samples 'a transnational culture' (2001: 385) and measures people's ability to survive in the global economy. They conclude that IALS measures *a* literacy, not literacies.

Darville (1999) argues the literacies measured in such assessments are exclusively work oriented to measure the workforce skills, rather than the claimed everyday literacies, as 'test items do not represent the real-life items as claimed' (Hamilton and Barton 2001: 377). This

implies that literacy measured in IALS measures global competition (Rubenson 2008) in addition to state performance and policy competition (Martens and Niemann 2013).

2.1.2.1 Methodological and conceptual challenges

In this section I discuss research in International Assessment Studies which deals with the methodological and conceptual challenges such programmes face. These are directly relevant to understanding LAMP and its intention to build on these criticisms, especially in what concerns language and cultural issues.

Scholars have concerned themselves with the analysis of the role of languages in international assessments as the translation and adaptation of testing instruments challenge the validity of cross-country comparisons (Ercikan 1998; Hambleton and Kanjee; 1993; Arffman 2010). Research is also concerned with the political status of languages used in assessments and the disparities caused by international assessments which are carried out in official languages rather than the minority language (i.e. Lao PDR is carrying out LAMP in Lao only, even though it is a second language for a large percentage of the testees who either do not know Lao or rarely use it). It has also been argued that the development of international assessment tools in English has favoured English-speaking testees and Anglo-Saxon languages and cultural closeness to Western culture, and especially Northern American culture. This leads us to the issue of culture in international assessment.

Carney (2003) criticizes assessments for being a form of westernization, as the test items assess cognitive achievements as opposed to local values and are mainly developed and embedded in North American culture. The test item batteries, developed by testing agencies (i.e. ETS has played a major role in LAMP and all the OECD assessments), cannot but be culturally embedded and contextualized where they are developed. Maddox (2014) has dedicated extensive ethnographic research into the development of test items at the nexus between cultural specificity and global standardization imperatives, and also to understanding whether the poor psychometric characteristics of test items (also Gorur 2011) measured through DIF can be explained through ethnographic observations.

Although learning and skills are embedded in culture and context⁴⁴, the assessment of learning sees cultural diversity as a problem (Hamilton 2012) or a form of bias (Hamilton and Barton

⁴⁴ An example of this is provided by Malini (2007) who argues that numeracy practices are culturally embedded.

2001). Hamilton and Barton (2001) argue that to create cultural neutrality, international assessments are built upon a 'common cultural core of test items, which elicit a similar pattern of response across all cultures and language groups' (2001: 382), thus directing 'attention away from the very features that are most essential for an understanding of literacy and its dynamic within everyday life' (2001: 382). The 'cultural indifference' (Trohler 2013) or the creation of 'transnational culture' test items (Hamilton, 2012) implies stripping learning outcomes of their intrinsic nature and merging the learning background into facts and figures which can be collected whilst disregarding cultural complexities, which cannot be measured. Meyer and Benavot argue that there has been 'a shift towards culturally indifferent comparisons' (2013: 20) and that the cost of standardization and comparison is the loss of cultural diversity, a value which is too problematic for international assessments.

In addition to cultural issues, context differences have been extensively discussed (see Ercikan 1998) in relation to PISA and TIMSS with concern for structural curriculum differences, incomparability of grade and age (i.e. fifteen year olds being assessed through PISA have differing numbers of years of education depending on the educational system), etc. The need to cut across context and standardize implies developing decontextualized testing instruments, as described by Gorur.

All the elements are now detached, measurable and mobile. The teachers, the test items and the students have bowed out, no longer relevant in their particular forms. The bustle of the classroom and the fuss of real people and things have been translated into a neat, two-dimensional, ordered world of logits. And because logits are standard for a given pool of test items (Wright & Stone, 1979), data from PISA tests can be compared across time and place. The various bits of data can be worked on, manipulated and combined in new and different ways to create new patterns and understandings. [...] What these entities lose in becoming detached from their contexts, they gain in becoming commensurate and combinable. The world's

She shows how answers given to test items depend on the testees' context: 'The question is how many of the ten birds are left in a tree if two are shot? Depending on the learners' values, social position and interpretation various answers are correct. A rural dweller, who hunts birds, might answer 'Two dead birds on the ground and none in the tree as birds fly away when they get scared' (2007: 10).

educational systems 'become a chart, the chart ... becomes a concept, and the concept becomes an institution' (Latour, 1999, p. 36). Gorur 2011: 87 - 88

Gorur (2013) has researched the development of the battery of test items with policy actors involved in the development of PISA and suggests it is a highly contested terrain, as illustrated by an interview with an official involved in the development of PISA.

However irritating these discussions might have been, it was important to allow everyone to be heard, and for the process not only to *be* fair, but to be *seen* to be fair. [W]e can get very heated arguments about whether or not some items should be included, because [the country representatives] feel there is a bias against certain countries. So there are review meetings and forums for discussing this, and every country can send their experts there. But it will be unmanageable if the group becomes very large. So in the end, the Expert Group may make a decision having collected ideas from everyone. So at least the processes are made to be seen as being fair, by giving everyone the opportunity to express their opinion (Former PISA Official). Gorur 2009: 84

This leads us to the scholarly concern for transparency in international assessments. Although international assessments are considered a technology to ensure transparency in educational systems (Ozga et al. 2012), international assessments rely on a degree of secrecy (i.e. the instruments cannot be publicly shared in order to maintain the usability of the tests) and it is deemed necessary to keep secret internal decisions (rarely made public) regarding the highly complex, technical procedures which influence the outcome data. Meyer and Benavot argue that 'key assumptions and key decisions about categorization and the construction of measures are black-boxed by a complex array of behind the scene judgments and decisions' (2013: 21).

This leads to the psychometric complexity of international assessments, which Gorur calls 'statistical sophistry' performed 'within the limitations of large-scale testing, commensuration and standardization' (2011: 78), and which represents a barrier to analytical research of the methodology and frameworks upon which such assessments are built (Goldstein 1998). Porter supports this view, stating that such programmes are 'scarcely vulnerable to challenge except in a limited way to few outsiders' (1995: 42). Wiseman (2010) argues that the complexity of

international assessments makes them very sensitive, thus requiring careful attention with processes including sampling and DIF analysis. This 'statistical sophistry' is based on Item Response Theory tools, which model the behavior of data to condense all competences and skills into a single dimension (though multidimensional IRT models do exist)⁴⁵.

Sampling is another area of concern as it plays a crucial role in the validity of international assessment results whilst at the same time being a sensitive issue in the cross-country comparability (Wiseman 2010). Sampling can be 'played with' to improve results (i.e. low performing groups, schools, language minority or rural areas can be craftily excluded to improve the results). Owens (2013) suggests that there has been more consternation about the publication of results in league tables, than the psychometric methodology. We shall see in chapters five and six, sampling is an area which LAMP assemblage allies try to influence the data for governmental uses.

Closely linked to the issue of transparency, but not widely discussed in scholarly work (presumably because there is poor evidence of these processes), is the 'techniques for better data' which countries excogitate and apply in order to reduce international shaming in the league tables. Although there is little published in this regard, those involved in international assessments are aware that a whole set of techniques are made use of (i.e. techniques to randomly sample higher performing testees or schools).

Another issue of concern is the question of thresholds, or the definition of what is considered a sufficient level of literacy along the continuum of competencies to cope with knowledge society's demands. International literacy assessment scores are grouped into five levels, with level three representing 'a suitable minimum for coping with the demands of everyday life and work in a complex, advanced society' (OECD 2000: 11). This has moved literacy from a dichotomy of literate/illiterate to literate/not sufficiently literate, or as Atkinson (2013) suggests worthy individuals/unfit neoliberal subjects. Atkinson suggests that IALS level three also has the power to 'conflate subjects' interiority — the measure of their cognitive processing — and exteriority — the value of their very bodies as human capital — while erasing the context in which these minds and bodies exist' (2013: 5).

⁴⁵ For IRT to function, there need to be sufficient test items and responses in each segment the continuum is measuring. In LAMP Reading Components were introduced to highlight competences at the lower end, whereas IALS/ALL had more items at the higher end of the continuum.

Esposito and Maddox (2011) argue 'that identification of a 'minimum threshold' of functional literacy, and the notion of multiple 'levels' of functional literacy along a 'continuum' of proficiency promoted within psychometric approaches are open to a similar critique as the literate/illiterate dichotomy. Each must deal with questions of methodological rigour and arbitrariness in the specification of the cut-off point demarking sufficiency. Whether one is dealing with a dichotomous or polytomous measure, identical questions arise about how (and why) an individual can be thought to have 'sufficient' literacy' (2011: 4). Esposito and Maddox suggest that literacy and illiteracy be viewed as 'overlapping 'fuzzy sets' where there are degrees of literacy and illiteracy around the threshold' (2011: 8).

Although international data is presented in cross-country comparisons tables and ranked in league tables – such practices were warned against in an IALS-commissioned, expert report:

All comparative analyses across countries should be interpreted with due caution. In particular we recommend against the publication of comparisons of overall national literacy levels. We consider any rankings of countries based on such comparisons to be of dubious value given the methodological weaknesses. Kalton et al. 1998: 14

The IALS leading agencies contested the review and the cross country comparisons and rankings were published in the final IALS report (Thorn 2009).

Although this subarea of research shows there is extensive research on the weaknesses of international assessments, it does not seem to affect the growth of the trend. Grek suggests that although PISA results receive 'an initial critique of the statistics themselves and a questioning of their validity, but then an apparent acceptance of the data and appropriate policy responses to the situation as defined by these data' (2009: 29).

This said, it must also be stated that there is not only criticism of international assessments, as they are praised for catalyzing debate on education, producing evidence of educational phenomena, advancing highly technical and complex educational indicators, allowing countries to capitalize on third party expertise, benchmarking, increasing sensibility to previously ignored issues, developing comparative frameworks and international perspectives, attracting media attention, provoking political dialogue, developing assessment capacity building, increasing educational transparency, and democratizing potential (Fenwick et al. 2014).

2.1.3 UNESCO and the UIS

In this section I give an introduction to UNESCO and its Institute for Statistics in order to better frame LAMP within its institutional setting. After briefly introducing UNESCO's educational mission and activities, I discuss relevant scholarly debates on international organizations' role in international assessments in so far as they relate to my data analysis and findings⁴⁶. I describe the UIS within its historical developments and its current activities to explain its significance for this study and the findings I reach in chapter five and six. Finally I give a detailed overview of LAMP: its aims, its instruments, its implementation processes, and a description of its historical developments since its beginning in 2001.

The UNESCO Institute for Statistics is bound to UNESCO to support its mission and activities with instruments of quantification; hence the importance to outline UNESCO's mission and activities before describing the UIS. Since UNESCO's first days in 1945, the Organization is committed to 'building peace in the minds of men and women', by advocating universal quality education (with literacy as the basis of all learning⁴⁷) as a human right⁴⁸. This has made universal literacy one of the Organization's main commitments and is globally recognized as the most authoritative organization in the field of literacy⁴⁹. Its main activities are achieved by setting norms and standards, but also activities including clearing house⁵⁰, capacity building, catalyzing cooperation, and policy assistance and advocacy (Deacon 2007).

As opposed to many other international organizations, UNESCO is not a funding agency but a think tank or an 'intellectual' agency known to speak the language of peace and advocating for human rights in education (Cussò and D'Amico 2005). The Organization also serves a more pragmatic, economic agenda for national and educational development (Wiseman 2010) whilst not moving away from its human rights approach to adopt an entirely human capital, instrumental productivity approach⁵¹ (Cussò and D'Amico 2005). UNESCO takes a different

⁴⁶ It is beyond the scope of this research project to extensively discuss international organizations.

⁴⁷ As stated by UNESCO in the United Nations Literacy Decade mid-decade review, page 11.

⁴⁸ UNESCO aims to achieve its mission also by building intercultural understandings, protecting and valuing cultural heritage and diversity, but also by supporting scientific cooperation and freedom of expression

⁴⁹ Together with the OECD, UNESCO promotes literacy as a policy issue (Hamilton 2012).

⁵⁰ Collecting and distributing information.

⁵¹ As other prominent and authoritative organizations working education have done: the OECD and the WB (the largest external single financer of education according to Spring 2004).

approach to the OECD and the WB, which have reframed education 'as central to national economic competitiveness within an economistic human capital framework and linked to an emerging 'knowledge economy'' (Grek 2009: 24). However, in understanding UNESCO, the role and agenda of the OECD and the WB, embedded with neoliberal values in education, cannot be overlooked as they have come to play an important role in international assessments.

International organizations are nominally viewed as impartial, world institutional experts, perceived as legitimate authorities (Martens and Niemann 2013) which gives them the power to establish norms, values and standards (Martens 2007). Deacon (2007) states that as depositories of values and norms, international organizations try to shape policies whilst claiming to help countries with lower economic status. Barnett and Finnemore (2004) argue that societies entrust IOs with 'defining meanings, norms of good behavior, the nature of social actors, and categories of legitimate social action in the world' (2004: 7) and let them 'shape both how we see the world is constituted and our agendas for acting in it' (ibid).

As stated by my UIS LAMP interviewees, policy actors implementing LAMP share this vision of international organizations legitimately establishing values and norms, and blindly accept UNESCO's authority in the field of literacy.

The international indicators produced by international organization are considered authoritative and 'objective', though Guadalupe and Cardoso argue that 'competing political and ideological discourses' (2011: 14) are present in educational testing and the data the tests produce. Cussò and D'Amico (2005) state that comparing educational systems underlies comparing 'underlying political decisions'.

Countries implementing LAMP appear to accept LAMP indicators as legitimate without questioning the political and ideological assumptions embedded in the conceptual and methodological framework of LAMP, thus accepting the Organization's values. We shall see in chapter five and six how LAMP is constructed on multiple ideological discourse, black boxed as temporarily accepted truths. Accepting the Organization's values is has implications for the choice of alliances and the greater alliance (seen in chapter six).

The economistic approach to education, embedded in international indicators supported by the OECD and the WB (the first administrates international assessments, and the latter advocates and funds international assessments), further the organizations' agendas, whilst at

the same time being perceived as impartial, objective norms, values and standards which these organizations carry and diffuse (Wiseman 2010) into national education policies.

Drawing on Jones (2007), Grek reminds us that 'IOs such as the OECD and the European Union should not be seen as monolithic institutions but as part of the 'global architecture of education', described as 'a complex web of ideas, networks of influence, policy frameworks and practices, financial arrangements and organizational structures (Jones 2007, 326)' (2009: 32).

Deacon (2007) articulates this view stating that the global policy debate is not led in a hierarchical, monolithic way but as networks of 'global think tanks, global policy advocacy coalitions, global knowledge networks and global epistemic communities – seeking to advise and educate policy-makers and all those involved in the global policy-making processes. Coalitions of these actors come together under the name of 'global policy advocacy coalitions' which temporarily work together to achieve policy transformations. Epistemic communities of experts intervene and influence policy-making by helping the actors involved develop a specific understanding and establishing a desirable policy discourse. It may be therefore that although the OECD and other organizations are producing influential education policy tools, they are not alone in shaping national policies but that they contribute to a larger network of actors, to which the UIS also contributes.

As we shall see in detail in chapter five, UNESCO approaches literacy in multiple ways, which include a conflictual use of dichotomous and continuum models. Limage argues that UNESCO's 'internal contradictions and external inadequacies' (1999: 76) emerged after major changes at UNESCO in the Eighties when the USA retracted from the Organization. A series of scholars (i.e. Sack 1986) dealt with this, whilst Jones (1988) and Limage (1999) specifically dealt with the Organization's approach to literacy. Jones (1988) suggests that UNESCO's literacy approaches have changed according to political pressure and funding alliances over the years.

2.1.3.1 The UNESCO Institute for Statistics

In this section I introduce the UNESCO Institute for Statistics, tracing its history in educational statistics in order to give the reader the lens to understand the importance of developing LAMP in 2003, but also the significance of this study's findings.

At the request of US government, UNESCO ran international statistical programmes on education from its earliest days (Heyneman 1999) with the purposes of setting standards by establishing definitions and classifications to count education and literacy, and to collect, standardize, analyse and disseminate data worldwide. Until the 1980s, when the OECD started to produce comparative, educational statistics, UNESCO had been the only Organization gathering and disseminating internationally comparable statistics in education (mainly mass education and literacy rates) (Cussò 2006). Collecting internationally comparable statistics across the UNESCO Member States became increasingly complex (especially in terms of ensuring the same measures were behind the data being compared) and UNESCO's statistics were criticized for being narrow, unreliable and inaccessible (Puryear, 1995). In 1993, at a meeting of the Board on International Comparative Studies in Education (BICSE), a report by UNICEF and the World Bank presented strong criticisms against UNESCO for its poor quality statistics. In 1999, Heynemann suggested UNESCO's statistical role could easily be taken over by other institutions.

Today, the largest demand for statistical data originates from the Education rather than Science or Culture Sectors. The key to each of these three traditional internal problems is the inability to respond quickly and effectively to demand. That process is expected to occur with the establishment of the new institute. What is clear is that if the new institute does not rise to the challenge, there may be other institutions waiting to take UNESCO's statistical place. Heynemann 1999: 73

As we shall see in chapter six, there is still concern as to how the Organization can maintain its authoritative position in educational statistics, as other organizations (like the OECD) challenge its education statistical reach and quality.

This criticism played a role in the reconfiguration of the UNESCO Divisions of Statistics, which was transferred from UNESCO HQ in Paris to Montreal in 2001 and restructured as the UNESCO Institute for Statistics (UIS). Cussò argues that this transfer came with priorities being given to 'political and institutional ends' (2006: 533).

The first official statement claimed the UIS existed 'in order to foster a culture of evidence-based policy both nationally and internationally through the collection and use of high quality, timely data in education, science and technology, communications and culture' (UNESCO,

2000: 1)⁵². This evolved in the 2007 evaluation of the Institute to ‘meet the growing needs of UNESCO Member States and the international community for a wider range of policy-relevant, timely, and reliable statistics’ (UNESCO 2007: 3).

With the global educational agenda expressed in the Education for All (EFA) goals since 2000 and UNESCO’s coordinating role of the EFA goals, the need for internationally comparative data on all aspects of education systems has made the statistical activities of the UIS crucial to UNESCO’s activities and the evaluation of educational development progress.

In line with the vision of the UIS acting as an obligatory passage point⁵³ in the LAMP assemblage, Barnett and Finnemore (2004), argue that ‘IOs do more than manipulate information, they analyze and interpret it, investing information with meaning that orients and prompts action, thereby transforming information into knowledge’ (2004: 7), by orchestrating “numerous local contexts at once’ (Heyman 1995: 262) – thus ‘flattening diversity to generate universal rules and categories’ (Barnett and Finnemore, 2004: 39) to render it transferrable. As seen in chapter five, this represents a tension for UNESCO, as the Organization is uneasy with flattening culture into comparable, standardized facts.

Cussò and D’Amico (2005) state that the World Bank and OECD criticized UNESCO’s indicators for not providing ‘hierarchical classifications of countries’ and student learning achievements (2005: 200). This is a point of contention in that Cussò and D’Amico (2005) maintain UNESCO never published rankings as it contradicts its concern for diversity and that ‘the comparability of international education statistics that prevailed over the last four decades within UNESCO seems to have been relegated to history. As a UN agency, UNESCO’s mission was originally conceived in terms of development policies and international ‘technical cooperation’. The political objectives of the Organization’s statistical programme mainly corresponded to the planning and expansion of national education and literacy programmes. Despite their heterogeneity, countries of the south were to be measured using the very same indicators, with a view both to reflecting and comparing degrees of socio-economic modernization, and to help define the progress being made as regards development. This *comparatism* was nevertheless limited by the respect for the cultural diversity in line with UNESCO’s principles,

⁵² Document retrieved in December 2013 at <http://unstats.un.org/unsd/statcom/doc01/unesco.pdf>

⁵³ See chapter four on Actor-Network Theory for further clarification.

which include steering away from standardization in its educational activities⁵⁴. While the Organization did not publish any rankings of countries, the statistical comparisons were nevertheless based on a solid methodology for international standardization, including the production of comparable time series' (2005: 212).

The argument which Martens (2007) puts forward on governance by comparison (see second part of chapter two), drawing on Lehmkuhl's (2005) governance by rating and ranking, sees the increasing development and perceived need for international indicators to induce and support policy change through statistical comparison. We shall see in chapters five and six that UNESCO and its UIS position themselves with difficulty in this regard, and do not have a uniformed approach to deal with this growing field.

A session on UIS and LAMP, cannot but include a section on the main international organization developing and administering international assessments (but also driving their growth), the Organization for Economic Cooperation and Development (OECD). With the development of its 'indicator agenda' (Grek 2009), the OECD has developed an authoritative, highly legitimate position through PISA but also other international assessments, surveys and its annual publication *Education at a Glance*. Through PISA, the Organization has now come to act 'as arbiter of global education governance, simultaneously acting as diagnostician, judge, and policy advisor to the world's school systems' (Meyer and Benavot 2013: 9). Grek states that 'through its statistics, reports and studies, it has achieved a brand which most regard indisputable; OECD's policy recommendations are accepted as valid by politicians and scholars alike, 'without the author seeing any need beyond the label "OECD" to justify the authoritative character of the knowledge contained therein' (Porter and Webb 2004, 7)' (2009: 25). Klees and Edwards (2014) argue that there is widespread belief that international organizations like the World Bank but also Ministries of Education 'can uncover Truth, what works, best practice, and the like through reliance on rigorous quantitative research methods' (2014: 38).

⁵⁴ An example is the extract from the Executive Summary of the 'Investing in Cultural Diversity and Intercultural Dialogue': 'A curriculum shaped by the standardization of learning processes and contents – a 'one-size-fits-all' approach – does not serve the needs of all learners, nor does it respond to the context of their lives. This is becoming increasingly obvious to a growing number of countries which are seeking alternative pathways within educational systems' (UNESCO 2009: 15).

Drawing on Marcussen, Deacon (2007) writes ‘the OECD [...] indirectly compels member states into promoting a certain legitimate discourse even a certain concrete behavior’ and ‘plays the so-called ideas game through which it collects, manipulates and diffuses data, knowledge, visions and ideas to its members and to a still larger extent, to a series of non-member countries’ (2001: 29). I add that it does this whilst furthering the ideology of the Organization (‘committed to the principles of market economy and pluralistic democracies’, Rizvi and Lingard 2010: 128), embedded in the numbers it produces, as it has come to dominate as the only provider of reliable international educational indicators. It is for this reason that the UIS’s role in experimenting with more sensitive international assessments, although small, is an important alternative.

2.1.3.2 UIS on literacy

In this section I look into the way UNESCO’s statistical institute deals with literacy as it maintains and develops programmes which construct literacy as a dichotomy and as a continuum, in a contradictory manner in response to UNESCO’s contradictory literacy discourse.

The UIS, like most international organizations and institutes, is not a homogenous, singular institute with a uniform approach and ideology but better described as a complex body dealing with its mother organizations activities and principles, the multiple member states’ pressures but also ‘being’ what the individuals who work there make it into with their diversity of principles and perspectives. This is most obvious in the conflictual manner the UIS deals with literacy.

Having collected literacy census data for over 60 years, the Institute has now aligned itself with the Organization’s dual approach to literacy measurement as seen in its main frameworks and reports, which call for an enhanced understanding of literacy as a continuum, whilst still dealing with literacy as a dichotomous concept. We will see this extensively in my data analysis chapter, but it helps to see how three recent, keystone UNESCO reports deal with literacy data.

The *Global Literacy Challenge*, a recent UNESCO publication on literacy, argues that ‘Sound policies and planning need sound data – reliable and timely data on literacy levels of population groups, on patterns of literacy and illiteracy, and on the types, quality and outcomes of literacy programmes. Where this information is not available at national level,

efficient planning and implementation are rendered difficult' (2008: 41). Only one year later (in 2010), the *Belem Framework for Action* does not mention literacy as a dichotomous concept and maintains that in order to prevent and break 'the cycle of low literacy and creating a fully literate world' (2010: 6) all signatory countries (144 UNESCO Member States) must ensure 'that all surveys and data collection recognise literacy as a continuum' (ibid.). As a monitoring strategy for the Framework, one of the commitments includes 'investing in a process to develop a set of comparable indicators for literacy as a continuum and for adult education' (2010: 9), thus stressing not only the importance of literacy as a continuum but interestingly the need for the data to be comparative, in line with another recent UNESCO publication on adult education, the *Global Report on Adult Learning and Education*. The latter states that 'First, and as a basis for action, more data on participation is needed for middle- and low-income countries. It is difficult to argue without facts and figures and the levers and insights that comparative data provides. The lack of information from the South leads to the risk that inappropriate solutions from higher-income countries may suggest, and lead to wasted efforts just where funding is lowest and efficacy most necessary' (2009: 77). These three important reports correlate with the LAMP approach to literacy measurement, calling for greater support by making countries commit to comparative literacy data measured as a continuum.

2.1.4 What is LAMP?

In this section I give a detailed description of LAMP in order for my readers to acquire a comprehensive understanding of this international assessment Programme which plays a central role throughout this thesis.

The development of LAMP should be seen within the context of the development and growing phenomenon of international assessments (seen here above) but also within the recent developments at UNESCO and its Institute for Statistics in terms of the quality of educational statistics.

In 2003, a UNESCO Expert Meeting was held at UNESCO HQ to develop a working definition of literacy and a conceptual framework for literacy assessment⁵⁵. It is significant that this occurred only two years after UIS had been relocated (or more exactly 'remade' as a UNESCO

⁵⁵ This meeting followed a June 2001 UNESCO HQ meeting on EFA indicators. The recommendations put forward at this meeting included exploring the international assessment of literacy skills.

institute) in Montreal (Canada) and the reputation of the quality of its statistics was being rebuilt (Heynemann 1999); but also at the same time as the OECD was implementing its second PISA round and had already implemented several adult literacy assessments. At the 2003 meeting it was suggested that UNESCO should develop a programme for measuring literacy across countries, in order to produce better and more reliable literacy data, especially, in lower and middle incomes countries.

There is a perceived need for better statistical data on literacy leading to a deeper understanding of literacy acquisition and practice. A considerable amount of research and effort has already been undertaken by a number of institutions to develop literacy, assessment methodologies which lead to reliable data. A number of methodologies have been developed and tested, as well as national surveys conducted. These methodologies served as starting points for the discussions of the meeting. UNESCO 2003: 3

The programme would be called LAMP, the Literacy Assessment and Monitoring Programme. LAMP is a household-based assessment of literacy⁵⁶ and numeracy levels measured with standardized tests. The result of each test places each individual that sits the test along a continuum of competences, divided into five levels that go from poor literacy to proficient literacy. The five levels of LAMP are described as follows⁵⁷:

Level 1: the individual has very poor skills and may, for example, be unable to determine the correct dose of medicine to give a child from the label on a package.

Level 2: respondents can only deal with simple, clearly laid-out reading tasks. At this level, people can read but test poorly. They may have developed coping skills to meet everyday literacy demands, but they find it difficult to tackle new challenges, such as certain job skills.

Level 3: considered a suitable minimum for coping with demands of daily life and work in a complex society. This skill level is generally required to successfully complete secondary school and enter college.

⁵⁶ Though it does not assess writing skills.

⁵⁷ The following description was taken from the UIS LAMP website

<http://www.uis.unesco.org/literacy/Pages/lamp-literacy-assessment.aspx> in May 2014.

Level 4 and 5: respondents demonstrate a good command of higher-order information processing skills.

LAMP was developed in the belief that international literacy assessments for low and middle income countries needed to give greater consideration to comparability issues across languages and cultures⁵⁸, but also account for societies with a greater percentage of people scoring at the lower end of the proficiency continuum. It is also conceived as a capacity development programme, involving the transfer of technical capacity so that countries can sustainably produce assessment data (though two thirds of the test items belong to ETS or Statistics Canada and cannot be 'kept' by LAMP countries) and apply international assessment methodology to other fields of assessment.

LAMP was initiated as a pilot to test whether the IALS instruments and processes would work everywhere, but also to test and validate the final LAMP instruments. The first pilot countries to engage in LAMP were El Salvador, Kenya, Mongolia, Morocco, Niger, and the Occupied Palestinian Territories, whilst Vietnam, Jordan and Paraguay joined later. Of these piloting countries, only the Occupied Palestinian Territories, Mongolia, Jordan and Paraguay continued until the main assessment and data generation phase. Lao PDR is still in the process of carrying out the pilot assessment for the validation of the Lao adapted and translated instruments.

The LAMP process usually follows this process: countries express interest, UIS carries out an initial workshop during which UIS tries to define the level of interest and political support for the Programme, and then a Memorandum of Understanding is signed between the country government and UIS. At this point further training workshops are carried out, a national LAMP team is put together, the National Planning Report is developed and the instruments are adapted and translated. The instruments are then tested in a pilot assessment based on a sample of approximately 500 individuals. Once the instruments have been validated, the main assessment is carried out on a probability sample of at least 2,250 individuals aged 15+ (evenly distributed across the two modules, i.e. lower and higher levels). The raw data is then entered using a data capture software provided by the UIS. Finally, LAMP undergoes processes of data cleaning and weighting at the UIS to ensure the quality of the data and stamps it as LAMP data.

⁵⁸ During the pilot phase, LAMP was translated into six language families (Afro-Asiatic, Altaic, Austro-Asiatic, Indo-European, Niger-Congo, and Nilo-Saharan), which included three scripts (Arabic, Cyrillic, and Roman alphabets) and two numeral systems (western and eastern Arabic numerals) (UIS 2009).

LAMP tests⁵⁹ individuals' skills⁶⁰ with a set of testing instruments. The instruments are made up of a Background Questionnaire (on the respondents' socio-demographic characteristics but also includes questions on testees' self-perception of their literacy skills – i.e. how well can you write/read/calculate?) followed by a Filter test which broadly divides testees into those at lower levels to be tested with a test called Locator (assessing prose, document and numeracy items at the lower levels) and reading components (also at the lower levels as these are pre-reading skills) or at higher levels to be tested in booklets 1 or 2 (two equivalent booklets assessing prose, document and numeracy items at higher levels).

The reading components include vocabulary (to verify competence in the assessment language), digit naming, letter naming, word recognition, decoding, sentence processing and passage comprehension. These five components are measured separately to highlight greater detail at the lower end of the literacy continuum and are based on a framework developed by Sabatini (based at ETS for UIS) who draws on Perfetti's (2003) principle of learning to read which states that 'the comprehension or 'meaning construction' processes of reading are built upon a foundation of component skills and knowledge of how one's writing system works' (LAMP Framework for the Assessment of Reading Component Skills 2004⁶¹: 3).

The prose and document literacy and numeracy tests are made up of a total of 80 test items. The prose and document tests are based on the ALL⁶² Prose and Document Framework⁶³ (2001) which defines and represents domains of interest, identifying and operationalizing item constructing characteristics, and the empirical basis for data interpretation. The numeracy items are based on the ALL Numeracy Framework (2003) which reviews how numeracy is constructed but also the approaches to assessing numeracy and issues considered in the item development, their development and scoring guidelines, and feasibility studies on the selection of the items.

'Some literacy (and numeracy) tasks in LAMP originate from the IALS/ALL pool and some will be developed by the participating countries. All items are adapted to the cultural context. The

⁵⁹ Based on Latent Trait Analysis, which includes complex statistical theories such as Item Response Theory.

⁶⁰ In order to report data on populations/sub-populations (not individuals).

⁶¹ Revised in 2005.

⁶² The International Adult Literacy and Life Skills Survey.

⁶³ This was developed for IALS and not revised for ALL or LAMP.

creation of new items also ensures that each country integrates the framework, as well as broaden the cultural perspectives that are represented in the item pool.' LAMP International Planning Report: 19

In the early stages of LAMP, workshops were organized with the first pilot countries (at this stage Mongolia, El Salvador, Morocco, Niger and Kenya were part of LAMP) to develop the test items which would both ensure international comparability (including comparability with IALS results) but also local relevance of the data, and to ensure countries were following the instructions ETS and the experts were giving them. At the early stages of LAMP, the test items were intended to fall into four categories: international (derived from the IALS test pool), LAMP (developed specifically for LAMP and which would ensure comparability among the LAMP countries) and then national test items and national basic level items (which would ensure the data responded to the needs specific to each context but not support cross-country comparability analysis). All the test items were based on the same frameworks developed by ETS and then validated in two stages: (i) a more 'conceptual' one carried out by ETS in 2005/06, and (ii) a more empirical one (with field testing) of all items and carried out by ETS and UIS.

Not all the test items in LAMP were drawn from the ALL and IALS test batteries produced by ETS and Statistics Canada, as a small percentage was developed by individual countries taking part in the pilot phase of LAMP. One third of the items were developed by ETS, one third by Statistics Canada and one third by the first LAMP countries⁶⁴ (see Maddox 2013 for a detailed analysis of how a local LAMP test item develops into a global test item). This did not represent a problem as it is not the origin of the test items that makes it relevant, so long as the test items can be adapted and validated. However, the fact that ETS and Statistics Canada did not welcome adaptation did represent a problem. UIS chose partners for LAMP which were not in line with the Programme's aims to value local diversity. LAMP's partners value standardization and comparability more than diversity (a tension which is intrinsic in LAMP and which I discuss in chapter five). This in part explains LAMP's difficulty to meet its '*true purpose*'.

Apart from the reticence of ETS and Statistics Canada to validate adapted test items, the main problem with all the test items used in LAMP is that they are built upon on a framework

⁶⁴ ETS granted permission to the UIS to use the items without changes, Statistics Canada granted permission to use and adapt the items.

produced by the Educational Testing Services and Statistics Canada⁶⁵, developed on a pilot assessment carried out in English in the USA, for one age cohort, in 1985 (St. Clair 2012). This framework is not only dated but also relates to North American culture and every day literacy practices. This compromises all international assessments as they reach beyond the area the framework was piloted for (as seen in the section in this chapter dedicated to the conceptual and methodological challenges to international assessments). Thus, the conceptual bedrock of the IALS-ALL effort was weak. It was then transferred to LAMP (and PIAAC as well) and not dealt with in the early years of LAMP⁶⁶. LAMP's claim of local adaptability therefore was faced with practical and methodological constraints that led to higher levels of standardization than initially envisioned.

Throughout LAMP's life there has been no single direction but several evolving approaches, and the final outcome is explained by all the variables and events underlying its phases. To do justice to the Programme therefore, the LAMP description is not complete without a historical overview of its development, which includes a major change of direction in 2007. One of my UIS LAMP interviewees⁶⁷ described LAMP's historical development in six phases:

1. *Phase 1. 2001-2003. Initial ideas for LAMP were discussed but nothing was very clear apart from the need to get into the assessment field.*
2. *Phase 2. 2003-2005. LAMP decided to replicate IALS/ALL, even though there were some voices of concern. These concern were disregarded by ETS and Statistics Canada.*
3. *Phase 3. 2005-2006. It was confirmed that LAMP would replicate IALS/ALL because its instruments and methods were accepted as 'working globally'. The important thing was to generate data and consolidate the methodology as 'the' standard.*
4. *LAMP was about to be ended in late 2006 (after the external evaluation of the UIS). This did not happen, not because the UIS wanted LAMP, but because the US government exerted pressure (the White House supported LAMP). LAMP took a new direction but was already 'half cooked'.*
5. *Phase 4. 2007-2012. The UIS established a LAMP team. A more critical approach was developed to try to fix the view that LAMP was not in 'tune with its true purpose' (this is an interviewee's*

⁶⁵ And consultants involved in the development of the numeracy framework.

⁶⁶ If LAMP wanted to develop a more relevant framework, it would have had to do this before developing its testing instruments.

⁶⁷ This is based on UIS#2 interviewee's historical reconstruction.

statement as seen in chapter five) as initially set out. There were few resources but some support from the UIS and others partners.

6. *2012-present (2014). There is a financial crisis at UNESCO and LAMP's future is uncertain.*

This brief historical overview shows how LAMP was never a pre-established and defined Programme (like other international assessments) but described by a UIS staff member as '*a sort of involuntary experiment where the purpose was errantly reframed*'. The same UIS staff member suggests LAMP '*benefited from the weakness of the UIS that never set a clear idea for it, but also suffered from this since the UIS never knew what to do with LAMP*'.

Together with the international assessments discussed in the first part of this chapter, LAMP is part of the universe of international assessments. Within this universe there appear to be international assessments which have gained greater prestige over others, with their success being measured in the number of participating countries. Among these assessments, LAMP has not gained a prestigious position. Although LAMP's aims were timely in 2003, PISA for Development and PIAAC for lower and middle income countries have become more attractive for countries participating in international assessments. I will return to this tension in chapter six and seven with the discussion of the *greater and smaller alliances* in the *web of multiple alliances*.

2.2 International Education Policy and International Assessments Studies

Heading 2.2 introduces the second part of this chapter which theoretically frames my research questions and analysis through a discussion of international education policy and international assessment studies.

2.2.1 International Education Policy

In this section I discuss international education policy as a broader field of research informing my research question. The relevance of this field relates to LAMP being constructed as an initiative to inform policy which officially justifies the development and implementation of international assessments.

It is argued that educational policy processes (in particular policy agenda setting, policy formulation, and policy evaluation) have been deterritorialized (Verger 2014) and are no longer exclusively national endeavors (Deacon 2007) but strongly influenced by multiple, complex, global dynamics (Rizvi and Lingard 2010). Scholars like Lingard (2014) reject methodological nationalism in present day education research. Although Zymek and Zymek state that national educational systems have not developed as self-contained units in the last centuries but evolved by looking abroad through ‘a complex sequence of ever-changing processes of regional and trans-regional, national and international systematisation and rationalisation in education, sometimes replacing, sometimes overlapping one another’ (2004: 26) and Tilly (2004) suggests humanity has globalized repeatedly, in this thesis I am referring to more recent forms of global educational policy.

For clarity therefore, and without going into the scholarly debates about the meanings of globalization, all references to globalization in this thesis are to its recent manifestation in which time and space have been compressed and speeded up through instantaneous communication. This recent, complex world order is described as boundary-free, interdependent, interconnected, within which all actors have become global, with a worldwide reach and impact (Deacon 2007) and distinctions between the global and the local have become blurred into a new spatiality (Ozga and Lingard 2007: 65).

Although Apple et al. (2005) suggest there is a dearth of research on the implications of globalization on educational policies, pedagogies and politics, the majority of recent education

research is positioned within the globalisation era, thus implicitly engaging with the effects of globalization more or less overtly. I would thus contend that extensive literature *has* been dedicated⁶⁸ over the last decades to examining the implications for education of what is understood as globalisation, especially since there is little consensus over what this contested, all-including, widely-used concept means (Rizvi in Lingard and Ozga 2007).

Two scholarly debates in international educational policy, discussed here below, concern my research. These discuss questions of global educational convergence towards an international model of education and the theory of policy lending and borrowing.

2.2.1.2 Convergence theorists and culturalists

In this section I look into the scholarly discussions which broadly frame themselves in World Culture Theory, Culturalists and Globally Structured Agenda for Education in their understanding of the level of global educational convergence. I end this section with a discussion by Waldow (2012) who argues that despite the different theoretical views, all theorists agree on there being an element of standardization.

The convergence discussion has divided scholars into convergence theorists and culturalists, who argue the extent to which globalization has a uniforming impact on national educational policies and practice. Convergence theorists like Meyer and Ramirez (2000) defend the 'World Culture Theory' debate (a neo-institutionalist theory of education) by arguing that a Western, common world culture is emerging to impact on educational structure, content, organization and values reforms (Steiner-Khamsi 2006) and that global pressure is institutionalized so that local governments come to share global understandings of education (Steiner-Khamsi and Stolpe 2006). According to WCT, common policies are disseminated and adopted around the world as normative, western modernity ideas that 'demonstrate to the international community that they are building a 'modern state' (Verger 2014: 3).

Culturalists (Spring 2009) on the other hand, argue that global educational discourses and international models of education are mediated by local histories, politics and cultures (Rizvi and Lingard 2010), hence adopting different meanings according to the local context (Anderson-Levitt 2003). Lingard and Ozga (2007) argue that context matters when analyzing

⁶⁸ I.e. Scholars in the New London Group.

global trends and forces at play when the local and global meet in a 'global policy space in education' (also Lingard and Grek 2007; Lingard, Rawolle and Taylor 2005) and that global policy research should 'capture the possibilities of simultaneously 'local' and global development, and reflect the influence of historically embedded assumptions and beliefs on the mediation and translation of global policy pressures' (2007: 66), giving rise to 'vernacular education policies' (2007: 69).

This debate relates to my research in that this policy level convergence appears unidirectional from high income countries (which become 'reference societies' - see Schriewer and Martinez 2004; Waldow 2012) to middle and low income countries (Steiner-Khamsi and Stolpe 2006) although they are not entirely a form of external pressure, as more and more countries are voluntarily deciding to adopt global trends and policies (Verger 2014). Large scale, international educational projects like international assessments play an important role by institutionalizing the process of convergence and providing international indicators to support and persuade the adoption of common policies. Culturalists would question to what extent international assessments support convergence at practice level.

Forwarding the culturalist thesis, Steiner-Khamsi and Stolpe (2006) carried out a study of global educational policies travelling to Mongolia and illustrated how global discourse travels at 'policy talk level' but once it is enacted in practice it is localized, and in this specific case, Mongolized. Green (1999) also recognizes that international forces are creating convergence at policy rhetoric and policy objective level, however he suggests there is little evidence of systematic convergence in practice. Mok and Welch (2003), who also agree on convergence occurring at policy rhetoric level, suggest it does not explain 'the complicated processes of change and the dynamic interactions between global-regional-local forces that shape education policy-making in individual countries' (2003: 25).

Verger argues that alongside the World Culture Theory, is the Globally Structured Agenda for Education, which 'sees the world capitalist economy as the driving force of globalisation and as the main causal source of the profound transformations manifested in the education arena today (Dale 2000)' (2014: 2). Within this theoretical approach, the competitive global economy is the driver of change and convergence as it defines 'what the main problems are that states should address, but also the solutions they should adopt in the educational domain if they want to successfully integrate into an increasingly globalized and competitive knowledge-

economy' (ibid.). I draw on these arguments in my final chapter, as my findings suggest dynamics may be more complex than these approaches suggest.

Although scholars take different positions over the implications of globalization on educational policy and practice, Waldow (2012) suggests there *is* agreement among scholars that there is a central element of standardization (movement towards uniformity) in education occurring to different degrees, which is a manifestation of globalization. Waldow (2012), supported by Mons (2013), suggests this movement towards uniformity is not produced through coercion but through soft power which works through mechanisms such as international statistics, standards and benchmarks (Grek 2009) set by highly legitimate organizations, policy briefs and recommendations, etc. This argument highlights the important role international assessments are playing in the movement towards educational standardization.

2.2.1.3 Policy borrowing and lending

In this section I discuss the theory of policy borrowing and lending because not only has policy lending and borrowing become one of the main spin-offs of international assessments through the individuation of best practices for policy from top performing countries, but the dynamics of policy borrowing and lending and the rationales which drive this international educational practice, resonate closely with the findings of my research.

A central debate in the research of the globalization of education and global policy is the practice of policy lending (interest in the educational system of origin) and borrowing (interest in the educational system of arrival) (Waldow 2012). This theory deals with policy makers exporting policy ideas (lending) or looking outside the national policy boundaries for ideas that have already been put into practice elsewhere (borrowing). The phenomena of policy knowledge circulating globally (Ball 2012) is also known in research as policy transfer (Ball 2012), policy diffusion (Dolowitz and Marsh 1996), and policy attraction (Phillips 2004).

In the last decade, international assessments (in particular PISA) have given policy lending and borrowing increased momentum as internationally, best-performing countries have come to represent reference societies⁶⁹ to which education policy makers flock, in search of best

⁶⁹ Schriewer and Martinez (2004) suggest that nation-states compare their educational system performance against chosen, significant 'reference societies' which act as models for policy borrowing and lending (Waldow 2012). Werning Rivera (2004) suggests they are chosen for either comparability (geographical, historical or

practices and evidence for their policy reforms. The case known to all those in the field of education is the Finnish education miracle⁷⁰ (Sahlberg 2011). Kamens (2013) and Baker and LeTendre (2005) argue that the global standardization process is driven by the search for best practices (increasingly identified through international assessments), the adoption of similar policies to face normative international benchmarks measuring national and world educational progress (Strang and Meyer 1993), and through global pressure to align with international standards.

Steiner-Khamsi and Stolpe (2006) suggest policy transfer is neither copying nor wholesale transfer of policy but that it is always a selective process, giving life to hybridization of educational imports, and does not always bring a change of practice, ideas, policies or organizational models (Waldow 2012). As with other phenomena in the globalization of education, it occurs mostly at policy talk level (Steiner-Khamsi and Stolpe 2006) and its hybrid versions are most visible when implemented, as illustrated by Steiner Khamsi and Stolpe (2006) with the Mongolized version of outcomes-based education (OBE) and student-centred learning.

Further to researching the mechanisms of policy borrowing and lending, scholars have dedicated research to the rationales of policy borrowing and lending. Spring (2007) suggests countries borrow policy from others because they are 'coerced into doing so by powerful global actors or because it is in conformity with its particular ideological goals, or it better fits to sets of national cultural assumptions. In other words, national social policy choices reflect globalised policy options and contestations about these' (Spring 2007:18). Martens (2007)

cultural proximity), prestige (geo-strategic prominence of a country) and/or performance (economically and politically excelling countries).

⁷⁰ After outscoring the rest of the world's educational systems in PISA three times running, Finland has become an 'educational utopia' (Waldow 2012) and put the Finnish educational system under the global educational policy spotlight. Finland is now selling (i.e. Sahlberg's 2011 book is a good example of policy lending) its educational best practices for policy as thousands of official delegations (including officials from other high scoring educational systems), which Sahlberg calls 'foreign education pilgrims', visit Finland to learn what the Finnish schools are 'doing right'. Steiner-Khamsi writes 'the educational systems of Singapore and Finland (league leaders in TIMSS and PISA, respectively) have received so many accolades for their teacher education systems that policy makers from Ohio to Japan to Germany project features into these two systems that have nothing to do with reality (Achieve 2007; Takayama 2009; Waldow 2010)' (2010: 328).

suggests that policy borrowing is not entirely a voluntarily mechanism, stating that ‘since rating and ranking activities by the OECD appear to be based on objective criteria, scientifically researched by experts and presented in an easily accessible manner, it puts states under pressure to import and apply models for education which seem to have worked better in other countries instead of continuing on their own path’ (2007: 54).

Steiner-Khamsi has carried out extensive research in this area of international educational policy, asking ‘Why is policy borrowing more likely to occur after a change in government? Why are failed policies borrowed, and “worst practices” transferred, from one country to another? Why are educational crises created out of fear of falling behind “international standards?” How come everyone talks international standards, but nobody knows what they are? Why is the same set of global reform packages imported and sold as the solution to a diverse set of local problems?’ (2010: 328). Her analysis of what drives countries to borrow policy resonates strongly with my analysis of the functions that joining international literacy assessments serve. Firstly, Steiner-Khamsi argues that in order to understand why countries lend and borrow policy, a distinction must be made between early and late adopters.

Once the “epidemic” ends, most educational systems selectively borrow bits and pieces of the reform, while gaining immunity from other aspects. During the phase of explosive growth, policy makers adopt only rhetoric. They do so because they are afraid of being left behind and labeled as backward, old-fashioned, or premodern. Late adoption should be interpreted as an orientation statement made by policy makers to denote their geopolitical affiliation with a larger, modern, educational space. The “global speak” occurring at this stage is mostly symbolic, with few consequences for policy action at the national level or policy implementation at the institutional level.
2010: 334

Steiner Khamsi (2010) has argued that there are multiple political and economic rationales behind policy borrowing. She illustrates how policy borrowing can be a way of forming international alliances⁷¹, gaining international recognition and acceptance, as it acts as ‘a pre-

⁷¹ For example, Lao PDR’s NFE policy, which makes non-formal education compulsory for all adults who have not completed primary education, is a good example of a political alliance with Communist Cuba.

requisite for admittance to the international community of established market economies, thereby ending the stigma of transition' (Steiner-Khamsi and Stolpe 2006: 193).

A widely discussed rationale in policy borrowing and lending is the externalization theory (Steiner-Khamsi 2006; Waldow 2012), built upon the idea that policy borrowing and lending has a 'legitimization' function. Waldow (2012) adopts Schuman's legitimacy definition of a 'generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions' (1995: 574), and suggests that policy must also be rendered 'desirable, proper and appropriate' (ibid) to produce legitimacy. But how is a policy be rendered legitimate through policy lending and borrowing?

Waldow (2012) suggests seeing the 'production of legitimacy' (2012: 417) through Luhmann's externalization theory. Luhmann (1995; 1997) described modern society as subsystems (i.e. education, etc.) made up of internally linked communications, which cannot communicate with subsystems outside. Sub-systems can use external points of reference from outside (this gives the name to the concept of externalization) which are processed inside the subsystem – the importance of this is that the externalization process (i.e. external to the education subsystem) originates from within the subsystem and then processes it. The reference to an external point can occur at rhetoric level, without there being a process of transfer and change actually occurring on the inside. The theory of self-referential systems making externalizations applied to policy borrowing implies that references are taken from external educational systems and processed within and according to the rules of the national educational domain which is borrowing a policy idea (Waldow 2012: 421). Luhmann suggests many types of externalization, including externalization to values (i.e. neoliberal values in education), to principles and results of science (i.e. evidence based policy, PISA results, etc. which are perceived as holding scientific objectivity). Schriewer adds another type, 'externalization to world situations' (Schriewer 1988: 68), which together with other types of externalization, Waldow (2012) suggests it lends itself to the understanding of mechanisms of production of legitimacy.

The use of 'reference societies' (Schriewer and Martinez 2004: 34) in policy borrowing is used therefore to leverage support for policy change and especially in times of political conflict, it 'has a salutary effect on domestic policy conflict' (Steiner-Khamsi 2006: 671). This externalization theory is also supported by Halpin and Troyna (1995) and McLean (1995) who

argue that political legitimization through policy borrowing is used by policy-makers to justify pre-established reforms with less criticism than reforms tend to attract. Steiner-Khamsi (2002) points out that externalization to world situations is a short-term political strategy (which becomes self-referentiality when conflict has been dealt with), hence it is not surprising that policy borrowing occurs mostly at policy talk level. Rose (1999) argues that numbers are used to the same effect in spaces of contested, weak authority.

Further to the externalization theory, Steiner-Khamsi suggest there are other political rationales such as the 'change of political allies (e.g. Silova, 2005; see also Nóvoa & Lawn, 2002), stakeholder replacements as a result of changes in government (Luschei, 2004), or external 'shock' (Phillips, 2004, p. 56)' (Steiner-Khamsi 2006: 672).

In chapters five and six, the political and economic rationales behind policy borrowing but also the externalization and gaining allies, resonate closely with the reasons why Lao PDR and Mongolia join LAMP. Their rationales for participation in LAMP resonate less with the justifications (i.e. Lockheed 2013) scholars have identified for countries joining international assessments – as we shall see in the section dedicated to International Assessment Studies.

Lastly, the question of 'How come everyone talks international standards, but nobody knows what they are?' which Steiner-Khamsi's asks, helps understand the use of concepts like 'globalization' and 'international standards' in policy borrowing at rhetoric level. These concepts are extensively used at policy level as a stamp of approval. When unfolded, the meanings vary from context to context. Steiner-Khamsi and Stolpe suggest 'Politicians and policy makers increasingly make de-territorialized references to an imagined international community. [...] They generate reform pressure domestically by invoking fears of 'falling behind' and urge their constituents to comply with 'international standards' in education. What these international standards consist of has remained unclear' (2006: 201). In my data analysis, the use of 'internationally-empty, locally legitimizing concepts' plays an important role in the adapted identity of all those involved in the LAMP alliance.

Further to Steiner-Khamsi and Stolpe's theory of 'speaking the new language of the allies' (2006: 147), Stronach (2010) argues that policy actors around the world have come use 'hypernarratives' which imply policy actors chant a global language of education that is void of meaning but that allows them to speak the same language. This supports the ANT 'language of

convergence’ that I suggest when discussing the loose LAMP language of ‘better data’ (in chapter five) which allows all actors to converge at talk level.

2.2.1.4 Global educational values and neo-liberalism

In this section I elucidate how dominant global values shape policy processes, since present day global educational policy discourse is often confused or even used interchangeably with the dominant neoliberal policy paradigm in education. This helps unpack the dominant values that are embedded in international assessments (we shall see in chapter five that LAMP embeds neoliberal values in a contradictory manner) which both Lao PDR and Mongolia appear keen to adopt.

Lingard and Ozga (2007) argue that globalisation is seen only in a performative sense of neo-liberal economics and politics (2007: 65) and in its neo-liberal permeated version (Lingard 2009). But globalization and neo-liberalism are not inseparable concepts and it helps to clarify how scholars frame the neo-liberal paradigm in education.

Although global educational policy discourse travels globally into multiple cultures and contexts, carrying hegemonic values, which Rizvi and Lingard (2010) argue are to be understood through a neoliberal imaginary. It is difficult to distill global educational discourse from the neo-liberal social imaginary that has come to dominate over all other social imaginaries, wiping out all other ways of thinking about the world and globally normalized neo-liberal education policies (Rizvi and Lingard 2010). Henry et al. argue that the problem of the dominant neo-liberal ideology in education ‘is to be found in the way in which market logic has been allowed so to capture the education policy agenda as to render the systems and actors virtually powerless to cultivate alternative frames of reference for education’ (2001: 175).

Henig (1994) and Steiner-Khamsi and Stolpe (2006) also argue that the international model of education which dominates global educational discourse is paralleled with a neoliberal model of education. Rizvi and Lingard argue that we are seeing ‘an unmistakable global trend towards a convergence in thinking about educational values’ (2010: 72), with democratic and equality values in education re-articulated through neo-liberal values of efficiency and accountability.

But what are neoliberal values? They are drawn from the belief that the international free (uncontrolled) market economy (‘market fundamentalism’ Soros 1998) is capable of self-

regulating and generating without State control. This leads to wild consumerism, trade openness, deregulation of economic activity, privatization, capitalisms, and global competitiveness. Given the historical and present political orientations of (respectively) of Mongolia and Lao PDR, it is interesting to add that, socialist countries have reconceptualized free economies as 'market socialism' (Phinith et al. 1998) with vernacular forms of neoliberalism.

The neoliberal values that permeate our economies have led to social and economic transformations, which include education converging towards principles of marketization, privatization, corporatization and decentralization (Marton in Peters and Jon 2006). So how do these neo-liberal values translate when applied to education?

It is widely agreed that education in the dominant neo-liberal social imaginary, is understood in economic terms. Learning, conceptualized as lifelong learning, has become crucial to building knowledge capitalism and economic growth (Grek 2014) and is the means through which the individual but also the state become globally competitive, producing a dynamic work force of individuals who are ready to face the rapidly changing labour market in knowledge-intense economies. Spring sums up this economist approach to education conceived as human capital.

Human capital theory is used to evaluate the effectiveness of education as nested in the five drivers of global change (global democratization and the growth of a powerful civil society, the growth of market economies, the globalization of markets, the information revolution and the new role of governments). Human capital theory also contains an assumption that the good society is based on economic growth and mass consumption. The educational goal is teaching subjects and skills that contribute to economic growth. Consequently, the measure of a good education is a based on economic outcomes. In human capital theory, the financing of schools is treated as an economic investment that should result in measurable economic growth. 2004: 45

Education is conceived as an economic investment for private and public bodies, with minimum input calculated on the basis of the statistical evidence of maximum economic returns (more productivity and wealthy individuals) and increased tax returns for the state⁷².

⁷² A good example of this discourse is the OECD annual publication *Education at a Glance* which provides governments and policy makers with comparative, statistical evidence of economic returns from educational

Lingard states that the neo-liberal State demands ‘cybernetic input/output equations’ (2014: 34).

It is the issue of increasing a country’s global competitiveness that dominates neo-liberal global educational discourse. Using globalization as a synonym of neo-liberalism, Dale argues that ‘the clearest effects of globalization on education policy come from the consequences of states’ reorganization of their priorities to make them more competitive’ (1999: 4).

This economistic approach to education can be observed in international assessments, which are discussed in terms of the economic growth and the growth potential of participating countries – as assessments have come to be seen as a measure of a country’s skills capital. Agencies administering international assessments interpret literacy data by directly linking skill levels to employability earning potential, national economic prosperity and economic potential (Hamilton and Pitt 2011), even though scholarly work does not support this direct correlation (Rogers 2007). The latest Survey of Adult Skills (PIAAC) Report states that ‘skill-related policies’ complement more open trade and ‘are needed if the full positive effects on growth and employment are to be realised’ (2013: 51). Education is thus economic potential (the higher the population average scoring on PIAAC and PISA) but also economic risk (the lower the population is scoring on average on PIAAC and PISA). The economic approach to education in the neo-liberal social imaginary, helps explain the interest of countries to measure their human capital in terms of competencies along a continuum of skills.

Within this neo-liberal approach to education, Grek (2014) suggests there has been a paradigm shift in educational governance towards a skills and competencies agenda⁷³, which draws on human capital theories, lifelong learning and knowledge based economies, as an unfailing means to individual and state economic well-being and strength. Reading the latest Survey of Adult Skills (PIAAC) published in 2013 (the first of an annual report which will be produced every year under the title *OECD Skills Outlook*), it appears that there is a new ‘skills language’ that goes beyond the common concepts of ‘information-processing skills’ and ‘high- and low-skilled individuals’. The OECD has now introduced concepts such as underskilling and overskilling, skill pools, skills stocks, skill atrophy, skill imbalances, skills mismatches, skill gaps,

investment.

⁷³ For more information on skills and competencies see the Skillnet project, the Cedefop Research Arena and the OECD’s DeSeCo project.

skills loss and underuse, skills shortages, skills demand and supply, skills-use indicators, low-skill traps, 'activating the supply of skills' (2013: 36), importing skills, skills-oriented learning, but also skills policies and skills-driven prosperity. This is not surprising considering the OECD seems to have no doubts in stating that 'Skills transform lives, generate prosperity and promote social inclusion. Without the right skills, people are kept at the margins of society, technological progress does not translate into economic growth, and enterprises and countries can't compete in today's globally connected and increasingly complex world' (2013: 26).

Sellar and Lingard state that this narrative does not consider that increased skills and competencies cannot ensure increased wealth for individual and states, given 'the complex empirical reality of contemporary global markets and changing modes of production (Brown, Lauder and Ashton 2011)' (2013: 191). And although the faults of this narrative are widely acknowledged, Sellar and Lingard state that it still exercises 'considerable influence as a global policy discourse'(2013: 191).

To conclude this section on neo-liberalism in education, it must be added that international governmental organizations like the OECD have institutionalized the global neoliberal social imaginary and play an important role in spreading it through education, i.e. through international assessment programmes like PISA and PIAAC; and the World Bank and Asian Development Bank through loans which are given at the cost of specific educational policies being developed (i.e. the ICT education policy in Lao PDR). Rizvi and Lingard (2010: 131) argue that the OECD has 'ontologized' the neo-liberal globalization process, which Sellar and Lingard suggest, drawing on Bourdieu (2003), 'see the OECD using a 'performative' semiotic construction of the concept of globalization, implying only neo-liberal globalization and denying other accounts in the process' (2013: 192). Values allocated in national educational policies are therefore no longer negotiated at country level, but at the intersection between the global and national pressures. As we shall see, this relates to the values Lao PDR and Mongolia support in their approach need to adopt international assessments.

2.2.2 International Assessment Studies

In this section I argue that the extensive scholarly literature enquiring into international assessments can be discussed under the heading of International Assessment Studies (IAS), which can be further categorized into subareas of research (as seen in chapter one). Having

discussed (in chapter two) research on how the politics of international assessment and the challenges such programmes face inform the understanding and development of LAMP, this section considers scholarly debates in IAS discussing the role of international numbers in the dominant audit culture, the reconceptualization of governance and the shaping of global educational discourse as a result of the international assessment trend (intended as a global phenomenon). After contextualizing this research in the wider debates of literacy numbers for governance and policy processes, I discuss recent scholarly debates on the rationales of countries joining international assessments. These debates further the understanding of my data analysis discussion in chapters five and six.

2.2.2.1 Policy as Numbers

In this section, scholars including Sellar and Benavot (2013), Hamilton (2013), Grek (2009), Martens (2007) and Lehmkuhl (2005) make a strong case for the role that international assessment numbers have come to play in governance and policy processes.

With the emergence of PISA and other international assessments measuring the skills and the ability to apply knowledge, Amoako (2012) argues that international assessments have become an ‘uncontested initiative of globalized education’ institutionalized as ‘a regime of global educational governance’ (Meyer and Benavot 2013), which Meyer and Benavot suggest disempowers the very governments that adopt them and warn that in the future ‘PISA might become what Bourdieu (1998) called a ‘strong discourse’ - ‘impossible to refute and typically self-fulfilling, comparable to psychiatric discourse in an asylum’ (2013: 21). But let us first understand how these programmes have become so influential in policy and governance.

Rizvi and Lingard argue that the way education is governed in the globalization era has involved a shift from government to governance⁷⁴ in that policy is now a shared authority of national and international actors (2010: 117). Closely associated with governance is the concept of New Public Management⁷⁵ - NPM (Clarke and Newman 1997), also conceptualized as a government response to globalization, with a clear focus on outcomes and performance

⁷⁴ According to Roseneau (1997) governance implies a change in government structures and practices which developed after the Cold War with the emergence of a global neo-liberal hegemony.

⁷⁵ Succinctly put, the public sector’s structure and governing processes are managed in a similar way to how the private sector is managed (Lingard 2014).

rather than input and process (Rizvi and Lingard 2010). Mundy states that the development and use of international comparative measures of performance is a form of 'standard-setting multilateralism' (2007: 348) of governance which implies a shift from hierarchical government structures to networks and 'space of flows' (Castells 2000: 458).

The international testing culture and its knowledge-based technologies have come to play a crucial role in governance, to an extent that the policy process is hardly conceivable without the use of international educational statistics and indicators. Rizvi and Lingard (2010) state that what is considered 'good governance' requires global educational transparency, measurement technologies of educational performance, international performance indicators, and standardized testing regimes. Scholars have discussed this as a shift to governance by data (Mahon and McBride, 2008, Ozga 2009, Hamilton 2013) or more specifically 'policy as numbers' (Rose 1991, Lingard and Ozga 2007). Novoa and Yariv-Mashal (2014) state that the trend of international performance indicators and benchmarks play an important role in the internationalization of educational policies, which Broadfoot (2000) argues is powerfully re-enforcing the process of one world education model.

In 1991, Rose put forward the concept of 'policy as numbers' to indicate the increased reliance on numbers⁷⁶, considered as the most objective and scientific form of information, but also used for their 'intrinsic force of persuasion' (Pons and Van Zanten 2007: 112) in policy processes. Since then, there has been extensive scholarly debate on the role of numbers in policy processes and global educational policy discourse, especially with the growth of international assessments and the development of other internationally comparable indicators (i.e. the WEI – World Education Indicators).

One of the main scholars who has written about policy as numbers is Bob Lingard who, drawing on Bourdieu (2003), argues that policy as numbers now dominates present day policy processes (2014) and that 'the creation of the globe as a commensurate space of measurement' plays a central role in the emerging global education policy field as a form of global governance (in Sellar and Lingard 2013: 201). Together with Ozga, Lingard (2007) argues that policy as numbers works 'as part of globalised education policy discourses, as part of the

⁷⁶ An example of policy as numbers is the 'Skills for Life' policy in the UK, analysed through ANT by Hamilton (2010), as it is legitimized through the power of numbers.

new policy settlement within nations and new forms of governance, and as argued here, as central to the emergent global education policy field' (2007: 77).

Henry et al. (2001) argue that the appearance of policy as numbers is a powerful paradigm which has gained epistemological consensus within the shift towards the 'indicator culture within educational circles' (OECD/CERI, 1995: 4). The OECD is one of the main leaders in the development of the indicator culture and the more recent culture of performativity (quantitative comparable measures of student and educational system outcomes) (Henry et al. 2001).

Lingard's discussion of the complexity of governing through the categorization and calculation of people's attributes relates directly to the messiness and fuzziness of literacy which is transformed into governed facts (whether or not they are conceptually measurable facts as discussed by Hamilton in chapter two).

The paradox, in my view, is that the contemporary rise and rise of policy as numbers is set against many of the challenges (cultural, epistemological, ontological, visceral, phenomenological) associated with globalisation, but that is much more difficult for the state to create effective and meaningful technologies because of the increasingly complex categorization of people, which constitutes the population and which forms the basis of national statistics. People's personal attributes are messier, more hybrid than ever and thus more difficult to make tractable in and through numbers – the legibility of governing becomes more complex and difficult at the national level in the context of globalisation. Lingard 2014: 31

Head (2008) argues that evidence-based policy and policy as numbers are concepts that have developed within New Public Management, and that these concepts can be considered equivalent to the rationale approach to policy making (as opposed to incremental policy), representing a 'utilitarian turn' in the policy process which relies on social scientists and their sciences (Pons and Van Zanten 2007) to avoid making policy mistakes (as stated by the Mongolian Minister of Education, Education Policy Conference in Mongolia in 2012).

Drawing on Heintz's idea⁷⁷ of 'governance by numbers', Lehmkuhl (2005) suggests that the increasing publication of internationally comparable data presented in league tables serves a trend of 'governance by rating and ranking', which influences the policy behaviour of all actors involved in the league comparisons (though I would argue that it also influences those not directly involved) by putting pressure on countries to conform and compete through reform. The pressure works through simple, international 'naming and shaming' mechanisms which represent either a threat or reason for pride for countries (as we shall see in my data analysis). Rankings may be meaningless *per se*, as stated by Meyer and Benavot (2013), but Lehmkuhl suggests that this form of governance 'creates a more or less explicit pressure towards a convergence on those practices, forms of organization or behaviour that are *accepted* as best performing or best in line with the specific criteria of the respective rating or ranking framework' (2005: 3).

Supporting Lehmkuhl's argument, Martens (2007) contributes to the governance by numbers debate, suggesting that we have recently seen the emergence of a form of governance by comparison. Martens (*ibid.*) argues that comparisons through international educational statistics create performance and policy competition (showing those who are falling behind international standards and those who are leading the competition) and have 'a strong component of mutually compelling power which puts those being ranked and rated out under peer pressure' (2007: 40) to converge towards specific criteria of comparison (Martens and Niemann 2013). Although comparisons are seen as objective, scientific evidence for policy making, Martens (2007) drawing on Meyer and Ramirez (2000), states that a sociological institutional approach would suggest there is a willingness to submit to comparisons which is not functional but based on normative structures of social interaction, 'like the diffusion of a specific practice or mode of governance which influences the behavior of actors being compared' (2007: 42).

Martens takes this argument further and argues with Niemann in 2013, that in order for countries to reform their educational policy based on the results of international literacy assessments⁷⁸, two conditions need to occur simultaneously. There must be a gap between the

⁷⁷ Although Lehmkuhl writes in 2005, the only reference I can find is for Heintz 2008 – as the paper by Lehmkuhl omits the relevant reference.

⁷⁸ Their study focuses on the impact of PISA between 2000 and 2009 in Germany and the United States.

national self-perception and empirical results (which they call ‘perception’) and the results need to be a topic which is of crucial relevance for state purposes (which they call ‘framing’). Martens and Niemann (2013) apply this theory to the reaction to PISA results in Germany and the USA and suggest that although the results were similar in countries, the perception and framing conditions only occurred simultaneously in Germany, thus leading to secondary educational reforms. Martens and Niemann’s argument is supported by Steiner-Khamsi’s (2003) study of scandalization, indifference and glorifying of international assessment data to impact on policy change. Steiner-Khamsi argues that ‘references to international comparative studies or to league tables tend to be made if (and only if) they resonate with ongoing domestic policy debates’ (2003: 4), and in particular when external support is needed to support and justify controversial reforms.

Sellar and Lingard (2013) suggest international numbers enter a space of mutual governance where the global and the local work in unison. ‘Numbers, at global (e.g. PISA) and national levels, enable comparison as a new mode of governance, where the ‘global eye’ and ‘national eye’ work together to facilitate educational governance (Novoa and Yariv-Mashal 2003)’ (2013: 187). To support this they report an OECD interviewee suggesting that there is a need for countries to see themselves in the global picture. Indeed, we shall see in the analysis of my findings that Lao PDR and Mongolia suggest that in order to see their own performance and how to improve, they need to compare⁷⁹ and see themselves in the ‘global eye’.

Taking a less ‘external pressure’ perspective, Novoa and Yariv-Mashal (2003) argue that international indicators function as reference points which ‘lead the various national institutions to adopt ‘freely’ the same kind of actions and perspectives within the educational field’ (2002: 428), even though policies are ‘built on a rhetoric of ‘identity’ and ‘diversity’’ (2003: 428). Novoa and Yariv-Mashal (2003) also argue that benchmarking and comparability are ‘constructed as a political solution that will become the policy’ (2003: 429). Evans (2013) argues that countries reform policy based on their educational system’s relative success as measured in internationally comparable datasets⁸⁰, which act as a form of soft governance (also Mons 2013).

⁷⁹ Also a Lao proverb.

⁸⁰ But also comparative thematic reviews.

Novoa and Yariv-Mashal (2014) suggest that the renewed interest in comparative studies in education emerges from the climate of economic competition and the role of education can play in this race. The main interest of recent comparative studies is in measuring the other (2014: 14) as the development of international, comparative tools to measure quality and efficiency has taken a lead role in governance. Novoa and Yariv-Mashal (2014) argue that politicians use international educational indicators 'in order to build educational plans that are legitimized by a kind of 'comparative global enterprise' (2014: 14) but also as a means to resources and symbolic advantages within the European Union framework. Similarly to my discussion in chapter six on the uses of international indicators in policy legitimization, Novoa and Yariv-Mashal (2014) are thus stating that comparative technologies and knowledge are a strategy to legitimize national policies.

Fenwick et al. (2014) argue that international assessments act as regulatory, knowledge-based technologies that no longer only inform policy making but actually have become the process of governing. Drawing on Novoa and Yariv-Mashal (2014), Fenwick et al. argue that comparative knowledge is the new basis for governing as it is constantly referred to in order to justify educational policy and practice change in both the developed and developing world.

Steiner-Khamsi's (2003) argues that international assessments produce policy reactions that can be classified as scandalization (highlighting the bad numbers and rankings through comparison), glorification (highlighting the good numbers and rankings through comparison) and indifference (ignoring the data whether it is good or bad).

International assessments have given place to an international ranking competition, or as Lingard and Ozga (2007) have defined it, a wide-spread rush to 'achieve 'world-class status' as measured by international league tables of test success (e.g. by PISA and TIMSS)' (2007: 71). Kamens (2013) suggests PISA is surrounded by a horse race mentality with losers and winners, and that 'No matter how well their students perform on international tests, educators and political elites are constantly looking for ways to improve their educational systems. In the context of a globalizing economy every country is looking for an edge that makes them more competitive. Accordingly, all countries have the urge to compare and compete' (2013: 118) and that assessing success and failure has become 'a compelling, and irresistible, feature of world culture' (2013: 118). As Gorur (2013) has pointed out, for countries to be above average in

international rankings, technically there must be countries scoring under average, seen as losers.

Grek contributes to this governance debate by arguing that the OECD has become a dominant agent by providing internationally recognized, highly-legitimated comparable data, with programmes like PISA entering the national policy spaces and acting on them 'in ways that govern and shape education activity' (2009: 24), thus giving rise to a form of governing technology of comparisons which also has the power to legitimize. Grek suggests that the externalization theory (as seen in policy lending and borrowing) can also be applied to use of PISA in policy processes, 'as a form of domestic policy legitimation, or as a means of defusing discussion by presenting policy as based on robust evidence. The local policy actor also signals, to an international audience, through PISA, the adherence of their nation to reform agendas (Steiner-Khamsi 2004: 76), and thus joins the club of competitive nations' (Grek 2009: 35). Grek (2012) argues that the indicators and benchmarks developed for policy as numbers act as governing devices 'through mutual learning of the policy makers and experts that come together for their development, their negotiations and co-options, together with cross-comparison and competition, draw national systems closer into European and global frameworks and practices' (2012: 70).

In the chapters five and six I discuss how LAMP is constructed as a policy initiative to inform and monitor policy and in my conclusions I suggest LAMP enters the process of governance in Mongolia as a form of comparative pressure rather than a direct policy informing instrument.

To complete the section on policy as numbers, it is necessary to further unpack the power of numbers.

2.2.2.1.2 The power of numbers

In this sub-section I reflect on the power of numbers which is at the basis of the policy as numbers and governance by data discussions outlined here above.

International-number-driven knowledge is needed to inform knowledge-society policies. But how have numbers acquired this central position in the policy process? Although numbers carry values and ideological choices through the conceptualizations and methodologies intrinsic in their production, they are widely recognized as objective, scientific facts, considered

impartial, value-free and 'hard to argue against' (Gorur 2013: 4). Gorur states that numbers are considered by 'many policy makers today as a neutral and apolitical representation of reality, a weapon against prejudice. The use of scientific evidence has come to be seen as a hallmark of integrity in policy making' (2011: 90).

Lingard and Ozga state that 'the OECD and other international agencies have collected national data and pulled it into a single global field of comparison in a decontextualized way' (2007: 76) which has inherently decontextualising effects on policy. These international numbers are then ranked to render the extensive information succinct and easily digestible (Martens 2007: 41), whilst hiding complex educational dynamics (Wiseman 2010) and giving international numbers greater, blind power. Rose states that 'numbers render invisible and hence incontestable the complex array of judgments and decisions that go into a measurement, scale, a number (1999: 208).

Ball (2006) states that constructing such global commensurate spaces with a choice of values implies a form of global control, which coupled with the concept of policy as numbers, suggests actors involved in global assessments and indicators have a global hegemonic influence on values adopted in educational policy around the world. Lascoumes and Le Galès also state that 'instruments at work are not neutral devices: they produce specific effects, independently of the objective pursued [...] which structure public policy according to their own logic' (2007: 3), predominantly neo-liberal values. Lingard and Ozga argue that international educational indicators are a new technology of 'governance within neo-liberal policy agendas' (2007: 76), as they are digested and turned into policy solutions (Grek 2014) from the OECD's neo-liberal-agenda perspective.

Gorur has argued that criticism of 'policy as numbers' debunks numbers as '(a): quantification cannot capture the complexity of education and is inherently reductive; (b) numbers are products of particular theoretical and methodological choices, and therefore not innocent, apolitical or objective; (c): numbers are a technology of governmentality and should be resisted; and (d) numbers are being misused in policy and should be viewed with suspicion' (2013: 6). However, Gorur argues, numericisation practices (standardizing, classifying, benchmarking and ranking) are a socio-material performative practice, thus changing the way reality is understood by representing it, which could be engaged with through a sociology of numbers. Gorur suggests this requires asking questions such as 'what types of world are being

made through these practices? How are these particular renderings of calculability translating the world? In what ways are the particular practices being achieved? Which actors have needed to come together, and in what ways have they been assembled?’ (Gorur 2013: 10).

2.2.2.1 International assessments for educational policies

In this section I discuss studies that have been published on the effect on international assessment data and comparative knowledge that have had (or not had) entered the policy process.

The debates in international educational policy suggest international assessments have entered to a new form of global governance and become taken-for-granted tools in the policy process (mainly policy agenda setting and policy formulation processes) (Wiseman 2010). But why are international assessments so responsive to the ‘policy as numbers call’ rather than other international educational indicators? Valued for their international nature, international assessments have acquired a status that sees them as the most reliable measurement of educational progress, since they are based on direct testing.

There are few studies on the impact of international assessments on policy (Martens and Niemann 2013), though there are a number of scholars (but also technical experts writing reports for the testing agencies) who have engaged with the ‘policy as international numbers’ process, as we will see here below.

Hamilton (2001) argues that international literacy assessments ‘increasingly underpin, model, elaborate and justify educational and policy decisions about funding and pedagogy’ (2001: 192) and in 2010, Hamilton suggested that countries which took part in IALS and PISA then crafted policies ‘tailored to local circumstances but synchronized carefully with international survey measures’ (2010: 64).

Wiseman suggests that policy responses based on PISA results tend to follow an isomorphism (Wells and Henkin 2005) pattern (policy response is similar across countries but it does not converge), more often than a convergence pattern. Wiseman argues that ‘policy responses to PISA are incorporated into a broader culture of education characterized by shared norms, traditions, and assumptions about assessment and policy, local context and community, and both conformity and resistance. These many cultures weave together to create a complex

tapestry of policy responses to PISA. Recognizing this complexity creates a framework to understand the responses of shock, resistance and accommodation that often accompany PISA' (2013: 318).

Heyneman and Lee (2012) studied the impact of international assessments (TIMSS and PISA tests carried out in the 1990s) results on policy reform and suggest that almost half the countries (21 out of the total number of participating countries) carried out educational reforms (i.e. the National Education Standards in Germany). This does not imply that countries informed their policies with the TIMSS and PISA data (i.e. more funding to disadvantaged schools), but that such results acted on the educational policy agenda (i.e. instituting a greater assessment culture in educational systems).

Canada has attracted a lot of scholarly attention as Canadian policy makers and educators responded to the IALS results under international comparative pressure (although doing comparatively well in the league tables) by reforming the adult education policy and literacy pedagogy through classification and curricularization work (Pinsent-Johnson 2013), thus actualizing the 'ideological concerns about the ability of substantial portions of the labour force to 'fully participate' and 'adequately function' in a 'knowledge society'' (2013: 1).

Lockheed (2013) argues that the implementation of PISA and TIMSS has had a limited impact on national policies in developing countries, and that there is slim evidence of any change based on international assessments. Ten years earlier Elley (2002) writes that the TIMSS-R 1999 influenced policy reforms in Macedonia, Malaysia and Romania; and Gilmore (2005) found that PIRLS and TIMSS 2003 provided policy reform impetus to twenty developing countries. An evaluation by Aggarwala (2006) also found that TIMSS 2003 led to five countries in the Arab region to reform the curriculum, whereas Abdul-Hamid et al. (2011) suggests that following policy change spurred by TIMSS results, Jordan managed to affect the results of the second implementation of TIMSS⁸¹.

I come back to international data informing policy in my final chapter, to suggest that the politics of reception in each country are linked to national dynamics, making it impossible to

⁸¹ It must be noted that these are papers commissioned by testing agencies which are trying to support their own case.

generalize whether international assessment data models and frames all countries participating in such programmes.

2.2.2.2 Joining International Assessment Trends

In this section I look into the scholarly debates on the rationales for countries to join international assessments, with particular attention to lower and middle income countries. The explosive growth of international literacy assessments calls for an enquiry of what is driving this global trend. To date few scholars have engaged with this area of research, with even fewer providing empirical data.

Sellar and Lingard (2013) argue that the growth of international literacy assessments came as a global response to the neoliberal concept of lifelong learning, thus providing 'a measure of fluctuating human capital stocks'. A slightly different view is offered by Kamens and McNeely (2010) who argue that the growth of international assessments is based on educational ideology, the hegemony of science and the notion of managed society.

The dominant audit culture (Power 1997, Kamens 2013) plays a large part in the growth of international assessments. Kamens (2013) suggests one of the main concerns in the dominant international education discourse is benchmarking accountability and transparency for the fulfillment of democratic practices, but also as a measure of development progress. This has led to the institutionalization of an international audit culture which has legitimized all sorts of global evaluations and assessments (Kamens 2013), from high income to low income countries. Central to the field of educational governance and NPM is an international, performative culture of testing (Rizvi and Lingard 2010: 119) and international performance indicators as a way of ensuring mutual accountability against standards which are not questioned (Novoa and Yariv-Mashal 2003), democratic transparency (although one of the main criticisms of international assessments is their non-transparent nature), allocating dominant values (Rizvi and Lingard 2010), and creating global performance competitiveness. Novoa and Yariv-Mashal state that mutual accountability 'brings a sense of sharing and participation, inviting each country (and each citizen) to a perpetual comparison to the other' (2014: 18).

Kamens states that 'testing and transparency is no longer a luxury, reserved for the rich OECD countries. Evaluation is a requirement for all, rich and poor. In this new environment

accountability and transparency are believed to be the routes to progress and social development' (2013: 118). He then analyses the global uptake by regions.

First, the relatively richer countries use the OECD as a reference group and are more likely to use high stakes international achievement tests like PISA and TIMSS as vehicles for national assessment. The Arab countries, for example, are much more likely to participate in international testing than Sub Saharan Africa (47.6% vs. 13%). Secondly, countries that belong to regional associations in Africa and Latin America are more apt to use regional assessment and comparison as an assessment technique. Thirdly, the poorest countries that are not attached to regional associations of nations overwhelmingly opt to use national assessments. This spares them the embarrassment and political humiliation of comparing themselves to richer countries with more educated populations. Kamens 2013: 118

In most cases, international assessments carried out in low and middle income countries are supported by external aid. Lockheed (2013) suggests the WB (and other donor and aid agencies) is an important advocate for international assessments in developing countries⁸², driven by an interest in accountability by international benchmarks, as it seeks to monitor progress in aid and loan recipient countries and identify educational funding gaps. Lockheed suggests that international assessments have become a requirement to examine 'the comparative efficiency of education systems of developing countries; the relationship between national and international investments in the education sector and human capital formation in developing countries; cross-national differences in determinants of human capital growth, with particular attention to such input determinants as books, teachers, and class size and such institutional determinants as incentive systems, accountability, and school autonomy; the effect of human capital growth (improvements in cognitive skills) on economic growth' (2013: 167). Chung (2010) supports this stating that developing countries are forced into carrying out international assessments.

Kamens (2013) argues that low income countries join international assessments as they are 'under the gun to establish some kind of accountability of their educational systems. Their

⁸² As stated in the WB policy papers 'Primary Education' in 1990, 'Priorities and Strategies for Education' in 1995 and 'Learning for All: Investing in people's knowledge and skills to promote development' in 2011.

creditors; their elites; and parents are all demanding some measure of transparency' (2013: 120). Kamens also suggests that Eastern European, Central Asian and North African Arab and Middle Eastern countries joined international assessments in the 1980s and 1990s as for the 'prestige of competing and benchmarking themselves against the exclusive club of rich countries represented by the OECD (Stephen Heyneman, personal communication)' (2013: 124).

Lockheed (2013) also argues that high income countries like the USA take part in international assessments to look inside their own system through comparison with other educational systems in order to improve their quality (Bradburn and Gilford 1990), while 'developing countries were being encouraged by others to participate in international assessments, ostensibly so that the developing countries might improve their own national assessments, use assessments for monitoring and accountability purposes as their education systems became more decentralized, and place the results of their education systems on a common, international scale' (2013: 169).

A different view is offered by Sellar and Lingard who argue that 'the increasing value placed on measurement, comparison and quantitative data as an evidence base for national policy making has driven interest in programs such as PISA from members' (2013: 192) but also that international assessments have a self-perpetuating nature. The greater number of countries participating, the greater the interest of other countries (including lower and middle income countries) is to join in the subsequent rounds. It is within this 'self-perpetuating nature' that I believe a more complex picture is hidden.

Grek's (2009) research on PISA steers away from the 'informing policy' rationale seen in the previous section and the audit culture view which most scholars support, to suggest a different reason for countries to join. When Grek asked why non-OECD countries join PISA, a policy maker interviewee suggested that countries are interested in measuring the discrepancy between themselves and the OECD countries to evaluate how far they need to go to catch up in terms of skills and competencies. Based on other interviews with policy makers, Grek (2009) also argues that countries want to be seen to be taking part and put on the global map.

Adding to this rationale, Kamens who draws on Pizmony-Levy's (2012) capacity building rationale, suggests international assessments 'make ministers and ministries look good at

international conferences and events. They and their countries get good reputations for actively pursuing modern values. This activity may also have important material benefits. International agencies may find it convincing proof that national elites are credible partners for loans or aid' (2013: 128).

Wiseman (2013) takes this discussion further to suggest that joining international assessments provides countries with a form of legitimacy and credibility, a soft power in the global community, by belonging to a group of countries which value public education. He gives the interesting example of South Africa, which resonates closely with the findings of my data analysis.

The Republic of South Africa participated in TIMSS from 1995-2003, and then announced that they were no longer going to participate. South Africa was consistently a bottom performer in TIMSS and the decision to stop participating in TIMSS was partly due to a desire to focus more specifically on reducing variation within South Africa's educational system than international comparisons. However, a large reason for not participating further was to maintain some legitimacy in the international educational community rather than continue to post the lowest recorded performance in cycle after cycle. It is also important to note that South Africa turned its attention more fully to its own national large-scale educational assessments as an alternative. Wiseman 2013: 317

Although Verger (2013) does not look into why countries join international assessments, his research into why countries adopt global educational policies, specifically public-private partnerships as promoted by global policy entrepreneurs (i.e. the WB and aid agencies). He argues that global educational policy paradigms are adopted for rationalistic reasons (it works); for constructivist reasons (it is perceived to work); but also skeptic reasons (it can be instrumentalized).

The scholarly discussions presented in this chapter have allowed me to identify the research gaps addressed in this study and will frame the conceptual and analytical framework I apply to the understanding of lower and middle income countries' participation in international assessments. The literature in this chapter is supported by the conceptual instruments of

Actor-Network Theory (discussed in chapter four), as a methodology of enquiry applied to further understand the rationales of participation in LAMP.

This chapter is a discussion of my research design and the data generating process⁸³. Firstly, I present the research design as a case study methodology with an introduction to the two case study contexts. I then discuss the methods of enquiry I used to understand the rationales for LAMP participation in each context, and how the methods evolved *in situ*. I then reflect on my identity as an investigator and how my interviewees perceived me. This leads to a discussion on how trust played a role in the data generation process and how trust was built both with the institutions and the individual research participants involved. Finally, I discuss what I imply by meaningful data and the ethical challenges and considerations I faced during data generation.

In this chapter I also explain why I gathered data through a qualitative, double case study, and how this design is not entirely based on my ontological and epistemological standing but on the evolution of the data generating experience. I have also chosen to give space to my personal data gathering experience⁸⁴, as I believe it not only shapes the data I generated but is intrinsically part of it.

3.1 The case study contexts

In this section I introduce the two countries where data was generated on the rationales for participation in LAMP. It is rather challenging to give a sufficiently comprehensive picture of Lao PDR and Mongolia with a Ph.D thesis word limit. I have therefore chosen to focus on issues that may help understand each country in relation to my research question and data discussion. This section explains the rationale for the choice of the two study case context and the aspects of the contexts which are relevant to understanding my research in these contexts.

Given the theoretical framework discussed in chapter two but also issues of access to high level policy makers involved in LAMP, the research design of this thesis was developed as a double case study methodology (Simons 2009).

⁸³ These are key to understanding the value of the findings and the conclusions I reach (Murray and Overton 2003).

⁸⁴ This contrasts with what Whyte suggests is a kind of academic-imposed silence on the personal experience of field work (1993: 358).

As briefly mentioned in chapter one, the choice of the case study contexts for my research was limited. Having established access to carry out research on the LAMP, the only available contexts for my fieldwork were the four countries already implementing LAMP (Mongolia, Jordan, Palestine and Paraguay) and Lao PDR which was in the process of starting the implementation process. As I was keen to observe the entire LAMP process as it was happening, Lao PDR was the only eligible context. Observing that Lao PDR's LAMP implementation was proceeding too slowly for the time frame foreseen for my fieldwork, I decided Mongolia should be included in my research design. This meant that the research design went from a single case study context to a double case study context.

The double case study contexts made the research methodology richer in terms of being able to discuss the rationales for LAMP participation with policy actors in two different contexts which, as seen in section 3.1.3, have similar statistical objectives for adult literacy although their literacy situations are very different.

3.1.2 Contextualizing Lao PDR and Mongolia

Lao PDR is a one-party communist state (since 1975), set amongst fast-growing-economies in the Asian region, with a population of six and half million people⁸⁵. Most Laotians live in rural dwellings and their economy is based on traditional, self-subsistence farming and rice cultivation. This makes Lao agriculture not intensive, production-oriented but subsistence-oriented, at odds with the countries development objectives. The economy is defined as fragile and the labour market has small demand for highly skilled individuals (Reihnein 2007).

Lao PDR ranks poorly in most international rankings measuring progress towards Western valued paradigms of development. For example, in the Human Development Index Lao PDR was ranked 138th out of 187 countries in 2012. In 1971, Lao PDR was listed as a Least Developed Country by the United Nations Economic and Social Council, which worsens the labelling of Lao PDR as backward in the global eye. My interviewees cared to highlight that Lao PDR would 'graduate from the LDC list' by 2020, as declared by the World Bank. Important steps in Lao PDR's international relations are the joining of ASEAN in 1997 and the joining of the WTO in 2013, as a way out of political and economic isolation. Most of my interviewees

⁸⁵ The data in this paragraph is taken from the World Factbook accessed in December 2013 at <https://www.cia.gov/library/publications/the-world-factbook/geos/la.html>

supported Bounkhong's claim that 'Isolation is no longer possible. [...] We believe that no Lao feels happy about his or her nation's humiliating position' (2002: 157). As we shall see in the data discussion chapters, labeling and isolation issues that are interwoven into the rationales for participation in LAMP.

Lao PDR has developed a foreign aid dependency trap by initially depending on Soviet aid (until 1990) and then on foreign development aid (mainly loans from the ADB, the WB, and bilateral donors), which Phraxayavong states gives 'donors leverage over Lao policy' (2009:18). It has been calculated that Lao PDR is the country which has received the highest amount of aid and international loans per person in the world (ADB is the greatest loan and aid contributor in Lao PDR) (Vorapheth 2007). Lao PDR's history of aid has seen increased poverty and corruption (Phraxayavong 2009).

Mongolia is a young democracy (transition from Communism began in 1990), landlocked between Russia and China, with a small population of just over three million people⁸⁶. Once a traditional nomadic country (mainly dependent on livestock), the Mongolian economy is now labelled as booming due to foreign investment which has drastically increased the mining of Mongolia's mineral deposits. Going from a planned economy to an open market economy in the early 1990s, coincided with going from USSR-dependency to international aid-dependency (Rossabi 2005). Mongolia remains heavily dependent on foreign aid, even though it has now become a 'resource-rich country' and has one of the highest growth rates in the world (in 2013). Most conditional aid applied policies⁸⁷ to Mongolia have been based on a one-solution-for-all basis which did not take into account the unicity of Mongolia (nomadic highly dispersed people) (Rossabi 2005).

Between 1989 and 1992, Mongolia's HDI decreased from 0.74 to 0.57, leading the UNDP in 1993 to state Mongolia could be included in the club of Least Developed Countries based on GDP per capita and economic diversification, although the quality of physical life was higher

⁸⁶ This is the estimated population in 2013, according to the World Factbook accessed in December 2013 at <https://www.cia.gov/library/publications/the-world-factbook/geos/mg.html>

⁸⁷ I.e. Steiner-Khamsi and Stolpe (2006) suggest educational reviews and programmes in Mongolia have been planned, executed, funded and reviewed exclusively by the ADB and that all 'sector reviews are loan-directed'.

than the LDC criteria allowed for (because Mongolia's level of literacy was too high). Mongolia would have been granted LDC based on factors such as climatic risks, instable agricultural production, heavy reliance on copper export and import of oil, and little foreign assistance. The Mongolian government decided that LDC status would discredit Mongolia's reputation (Bruun and Odgaard⁸⁸ 1996) and the Mongolians' self and nation perception (Steiner-Khamsi and Stolpe 2006), finally disagreeing to submit to the formal LDC application in 1993.

3.1.3 Literacy in Lao PDR and Mongolia

In this section I discuss aspects of literacy in Lao PDR and Mongolia that are relevant to understanding the analysis of the data gathered on rationales for participation in LAMP. Given the focus on adults in LAMP (the Programme measures literacy and numeracy of 15+), the overview of Lao PDR and Mongolia in this section, concentrates on the state of adult literacy and Non-Formal Education (the channel of instruction for adults who have not completed formal education) in the two contexts and the national educational policies.

Although Lao PDR declared the country free from illiteracy in 1984 (Soukkongseng 2008), the present government statistics suggest only 73% of the over 15 year olds in Lao PDR were literate in 2008⁸⁹. To increase the literacy levels, Non-Formal Education (NFE) has been made compulsory since 1995 for all those between 15 and 40 who have not completed primary education. This model, called the Universal Primary Education Including Universal Non-Formal Primary Education For Adults (UNFEPEA), is being enforced with compulsory adult literacy courses across the country, even in the most remote areas. In 2012, the government had already declared that most provinces had completed UNFEPEA and could thus be declared literate. The remaining twelve provinces are remote, traditional areas where the government was working hard to declare them literate.

⁸⁸ Odgaard and Bruun, who documented the LDC case of Mongolia, compare Lao PDR and Mongolia, stating that 'all statistics, including UNDP's more comprehensive study, simply cannot describe to what extent living standards of a Mongolian herder and a rice-farmer in Laos differ' (1996: 109).

⁸⁹ <http://www.uis.unesco.org/Library/Documents/lao-pdr-unesco-country-programming-document-education-2012-2015-en.pdf>

In September 2013, the Lao National Television-English News Program presenter reported a talk by the Minister of Education and Sport, Dr Phankham Viphavahn, which sums up the government's view of the Lao literacy situation:

'The number of literates of 15 and up has reached 73.3% which is well on the way to the goal of 95% by 2015. Areas that have been declared illiterate free are Vientiane, and the provinces of Sing Kuang, Urumsai, Luang Prabang, Lung Nam Tah, Saia Boulai, Champassak and Boli Sam Kai. Dr Phankham called on the remaining nine provinces to work harder so that they too could declare themselves to be free from illiteracy by 2015. To date 135 out of the country's 147 districts have been classified as literate. Although we made much progress in the first phase of the plan, all sectors must strive to improve the curriculum in all areas of education, upgrade teachers' qualifications and eliminate literacy.'

In Mongolia, the educational system (and the consequent literacy levels) is challenged by nomadism, hostile environmental conditions, remoteness and a scarcely populated land. However, the spread of state boarding schools and literacy campaigns during Mongolian Socialism (1924 – 1990) had a positive impact on the number of Mongolians with access to education. During this period, illiteracy was statistically eliminated on two occasions: in the 1950s and 1960s, Mongolia increased its literacy rates and declared the country free from illiteracy, but revoked the declaration in order to start a 'two culture campaigns' between 1960 and 1963 to eradicate illiteracy again. Mongolian records state that 6% of Mongolians were literate in 1935, which grew to 42% in 1947, to 90% in 1963 and to 100% in 1968 (Steiner-Khamsi and Stolpe 2006). The end of socialism (1990), external policy pressures and a series of seriously harsh winters for nomads and their livestock, saw the levels of school attendance drop rapidly as boarding schools were closed and became too far from herder families, thus contributing to a significant reappearance of illiteracy.

The National Programme on Literacy Education (2004-2012), adopted in December 2004 within the United Nations Literacy Decade framework, states that Mongolia will 'eradicate illiteracy by reaching 99,9% of adult literacy rate by 2008' (2008: 25), and the recent Mongolian Non Formal Education Sector Analysis, states that 'the mission of NFE institutions at all levels is to eradicate illiteracy' (2009: 26).

Both Lao PDR and Mongolia appear to share the objective of eliminating illiteracy and have a history of statistically eliminating illiteracy problems (Steiner-Khamsi and Stolpe 2006). Both countries are also presently working towards statistically established literacy agendas.

3.2 Methods of enquiry - interviews, data analysis and observations

In this section I explain the choice of my methods of enquiry, how these methods evolved alongside the challenges I faced in the three settings.

As in most case studies, I have relied on three research methods to varying degrees: interviews, document analysis and observations (this latter to a lesser extent). Although the observations and document analysis proved insightful, my data findings rely heavily on the interviews with my research participants (the reasons for this choice are covered in the sub-section below).

The interviews, observations and document gathering were all carried out between February 2012 and November 2012, in Canada (UIS headquarters), Lao PDR and Mongolia. See the 'data generating timeline' sections for a detailed outline of locations and dates.

3.2.1 Interviews and an analysis of my questions

Considering the nature of my question (uncovering the unstated reasons behind lower-middle income countries' interest to join international assessments) but also the limited number of people involved in LAMP at UIS and in each country, in-depth interviews with those involved in the Programme seemed the most appropriate form of enquiry. I valued the choice of interviews for:

- the opportunity to build trust before and during the interviews;
- the richness of one-to-one, face-to-face interviews;
- and, the opportunity to value each interviewee's individual perspectives.

I had initially planned to interview my research participants in a semi-structured way which implies asking a set of open questions, whilst allowing the research participant's answers to lead to unforeseen questions and probing. Before starting to carry out the interviews, I had prepared a long list of questions⁹⁰ (appendix A), which I drew on depending on each

⁹⁰ I re-worked these as my understanding of LAMP participation evolved.

interviewee's role in LAMP. It is helpful to understand what I was discussing with my interviewees and to what extent my questions were informing my interviewees' perspectives. The most recurrent questions I asked are as follows:

- Why does your country want to carry out an international assessment? And why LAMP in particular?
- Why choose an international assessment and not a national assessment?
- Why choose literacy levels rather than literacy rates?⁹¹
- What does globalization in education mean for Mongolia/Lao PDR?⁹²
- Is there pressure to join international assessments?
- Do you use educational statistics for policy?
- How will you use LAMP data for policy?
- Does the implementation of LAMP mean the understanding of literacy is changing?
- Could you describe the LAMP process and the interactions with UIS/the national LAMP teams?
- What happens when the numbers/statistics are not good?

However much I wanted my interview questions not to influence my research participants, most of the questions above are based on the assumptions that frame my understanding of the international assessment phenomenon. For example, the first question implies that countries *want* to take part and that it is LAMP that meets their needs; other questions assume countries value literacy levels as opposed to rates, and that they join as part of a policy as numbers process (Rizvi and Lingard 2010). Recognizing that the questions I asked were based on my ontological and epistemological assumptions helps calibrate the meaningfulness of the information my interviewees were sharing with me. As I grasped the extent to which I was informing the information my interviewees were sharing with me, I tried to address this problem in my data generation methods, as I discuss below.

My research participants' keenness to talk and enthusiasm to share information soon changed how structured my interviews were, but also my how focused my questions were. I slowly moved towards asking fewer and more open questions to allow my interviewees to tell me

⁹¹ I usually had to explain the difference between literacy levels and rates.

⁹² I asked this question because my interviewees constantly made reference to globalization.

what they thought was important (i.e. how would you describe LAMP to a non-expert?) and less pre-informed by my views. This evolution started to take place during my first fieldwork stage at UIS in Canada.

It was not until I started my interviews in Lao PDR that I actually took the decision to make the interviews as loosely structured as possible (almost like natural a conversation), thus further reducing the number of questions I was asking and trying to get as far as possible by probing and listening to what my research participants valued sharing and thought I should know. Although some interviews still turned into semi-structured interviews, most of the interviews in Lao PDR can be described as conversations with few questions and a lot of probing. The reason I felt I had to take this decision was because my interviewees' answers appeared strongly informed by my questions and were thus not proving insightful. For example, when I asked *'how will you use the LAMP results?'* or *'how will you use LAMP data for policy?'*, my interviewees' responses were mostly affirmative and poorly articulated implying this was what my participants assumed I wanted to hear but had little to add.

I was expecting my research participants in Mongolia to share their perspectives in a similar way to their Lao counterparts, but found that in all of my Mongolian interviews, I needed to ask more questions than I would have liked and that I had fewer opportunities for probing. There seemed to be less willingness to discuss international assessments (even though Mongolia has seen a greater participation in international assessments).

If I were to describe my interviews on a continuum from loosely structured to structured interviews, I would place my Lao interviewees at the looser end of the continuum (very few questions needed), the UIS LAMP team interviewees in the centre of the continuum (a moderate number of questions needed), and my Mongolian interviewees at the structured interview end of the continuum (a lot of questions needed). I attribute these differences to the varying openness to publicly share information my interviewees saw as socially and politically acceptable. This is supported by the fact that most of my interviewees underlined that the 'less official' perspectives they were sharing with me, were personal opinions. Phrases like *'I do not know, in my opinion, but this is just my opinion,..'* often framed the more sensitive information my interviewees shared.

3.2.2 Interviewing in English as a second language

None of my research participants' first language was English (not even at UIS) though all my interviews were carried out in English. The high level of all of my research participants' jobs meant that almost all of them were fluent in English. On a few occasions my interviewees (in Lao PDR and Mongolia) said it was not the same to express their opinions in English. Even though I did offer to provide an interpreter, all of my interviewees insisted they could manage in English⁹³. I did not insist as I was worried it may be perceived as rude (by implying their English was not good enough), though for the sake of quality there were a few occasions in which an interpreter would have been helpful in terms of what my interviewees could articulate.

The Mongolian Ministry of Education provided me with an interpreter (they did not want me to choose one from outside the Ministry). I carried out one interview with this interpreter but unfortunately, she only summarized what my interviewees were saying making me lose precious information. On another occasion without the interpreter, I was unable to understand whether my Mongolian interviewee's poor engagement with my questions was due to his poor English or not wanting to share his perspectives. In Lao PDR, I also felt that an external interpreter was not welcome and that providing me with full access was as far as the Ministry's support would go. I gave this challenge extensive thought in both Lao PDR and Mongolia, but decided that insisting to have a professional interpreter might have proved counterproductive. In conclusion, I cannot but assume that the fact English is a second language for my interviewees has impacted on the quality of my data.

⁹³ In both Lao PDR and Mongolia, I had found interpreters who were fluent in English and both studied Languages at the State University. In Lao PDR the opportunity never arose and in Mongolia when I did need an interpreter, the Ministry of Education preferred to provide me their own interpreter (it was made quite obvious that this is what was preferred). On one particular occasion I was interviewing three LAMP members who spoke some English, together with a fourth LAMP member who spoke fluent English. It was rather unfortunate that when I asked questions, they would discuss amongst themselves and then summarize what they thought I should know in English. I was also aware that the role of the interpreter, together with what the interpreter considered acceptable for me acquire in terms of information, meant that the information may have been adapted somewhat. This led me to the feeling of concern over the data I was gathering according to the varying situations.

3.2.3 Document analysis

As mentioned in the opening of this section, my data generation also relied on document analysis. In order to gain a deeper understanding of the LAMP initiative and process of joining LAMP, I read extensively through the LAMP setting-up documentation, the LAMP test instruments, the guideline books that support LAMP (including the *LAMP International Planning Report*), working documents (including the *National Planning Report*), and correspondence between countries and the UIS LAMP team over the period from 2003 to 2012.

As stated by one of my interviewees at UIS, countries were not asked why they wished to participate, but ‘tested’ on how committed they were to implementing the Programme. This means that the correspondence between UIS and LAMP countries is not as interesting as it might be imagined⁹⁴. My document analysis mainly focuses on the *LAMP International Planning Report* and the *National Planning Report*⁹⁵, and a few other documents I specify in chapters five and six. I draw on these documents which I define the non-human actors of LAMP (see the detailed analysis of non-human actors in chapter four) to understand how LAMP constructs its identity but also how its identity is enacted in contradictory ways by its human actors (i.e. the policy identity of LAMP).

3.2.4 Observations, and the lack of LAMP activities

Although my initial research design included observations of LAMP trainings and implementation activities (i.e. piloting testing instruments, training sessions, etc.) for me to get an idea of how the LAMP teams relate to the Programme but also to observe the working relationship between UIS and the national LAMP teams), the observations that I actually experienced were rather different. The planned LAMP activities during my 2012 year of fieldwork were the following:

⁹⁴ There being no discussion on the rationales for participation, which I had expected to be the starting point of all participation.

⁹⁵ The National Planning Report is written by the national LAMP team with the UIS LAMP team and based on a pre-written template which becomes a mutual contract of agreement on how LAMP will be developed and used in the country (following the standards guidelines from UIS).

- At the UIS LAMP level, the team was planning on writing the International Report with the first LAMP data. The report was supposed to be presented at the end 2012 at the United Nations General Assembly.
- In Lao PDR, the Lao LAMP team was to be established in 2012; the 'National Planning Report' was supposed to be written by the national team and finalized with the UIS LAMP team; LAMP trainings were to be carried out by the UIS LAMP team; and the test instruments were to be translated/adapted into Lao.
- In Mongolia, the Mongolian LAMP team was supposed to receive the International Report on the LAMP data and comment on it; write the Mongolian national report on LAMP data; and receive UIS training on what the data meant and how it could be used.

Not only did none of the planned activities actually take place during my fieldwork period⁹⁶ at UIS, in Lao PDR and Mongolia, but during this time the head of the UIS LAMP team took up a new position and left the UIS LAMP team weakened. In 2012, the UIS and its LAMP team had to deal with the effects of the sudden funding cut by the USA to UNESCO after the Organization's General Assembly voted for Palestine to become a full Member State in October 2011, cutting the total funds by 22%. These events of course had implications on the activities that were to be carried out in 2012. As we shall see in chapters five and six, 'observing' the non-taking place of activities, whilst being part endlessly of the Programme is actually meaningful and supports my 'global ritual of belonging' finding.

The rapport-building meetings, interviews, and the missions I took part in, contributed to a deeper understanding of the LAMP process as such observations allowed me to pick up details which helped me understand my interviewees' feelings about what we were discussing. The opportunity of observing what was happening around me and interviewing participants in their real-life contexts allowed for more informative conversations (Verschuren, 2003).

I would add that although my research method is not designed as an ethnographic approach (mainly because the extent of observations I intended to include could not take place in 2012 but also because administrative processes summed to the PhD timeline constraints reduced the time available for me to spend an extended period of time in each research context necessary for an ethnographic approach), my method can be described as having an

⁹⁶ I would have even considered changing my dates or re-visiting the research settings, resources-permitting.

ethnographic style. I drew opportunistically on the full range of ethnographic qualitative research methods to respond to the different elements I was observing *in situ*. The elements which give my research a multi-sited ethnographic style derive from the fact that my data generating was not based on interviews occurring in a vacuum (i.e. over the phone) and analysing documents sitting at the desk of my university office, but consisted in gaining information that was external to the interviews and the documents (the latter were not allowed out of the UIS offices). In my data generation and analysis I drew on observations I made during my interviews and informal conversations I had during missions with my interviewees, but also by simply spending informal time with my interviewees as they enacted elements of the literacy policy and practice. I was thus informally acquiring information of my interviewees understandings of what was happening around them in regards to adult literacy and international processes of collaboration between the Ministries of Education and international organizations involved in education in Lao PDR and Mongolia, in an ethnographic style of research.

3.2.5 Participants

In this section I discuss the choice of my research participants at UIS, in Lao PDR and Mongolia but also how I expanded my pool of interviewees as I faced various challenges during fieldwork.

The most obvious research participants were all those involved in LAMP at UIS and all those who were part of the LAMP teams in Lao PDR and Mongolia. This is not simply an obvious choice, but also a selection of the people who would have some knowledge of the Programme. In Lao PDR (especially) and Mongolia there was very little knowledge of LAMP beyond the LAMP teams involved in the implementation of LAMP.

The *LAMP International Planning Report* establishes that each country must establish a LAMP team, which is a small group of experts put together by the local LAMP coordinating institutions (according to the guidelines LAMP should be implemented by collaborating institutions and not only one). The LAMP team includes a national project leader, literacy experts, a survey statistician, a data collection expert, a survey processing specialist, a linguist and a data analyst.

In total I interviewed twenty nine people involved in LAMP. My interviews were extensive and in depth, and I would describe my role as a participant observer of the process which the interviews focused on.

Firstly, I interviewed staff from the UIS LAMP team in Montreal. I spent one month analysing LAMP documents and interviewing the LAMP team at UIS. Staff were willing not only to share stories and give me extensive interviews but also share all LAMP documents and correspondence with me⁹⁷.

The second stage of my data generating took place in Lao PDR. Here only the leader of the Lao LAMP team had been appointed. The rest of the Lao LAMP team had not been formed yet, meaning that my interview sampling in Lao PDR required rethinking.

The Lao LAMP team leader gave me two lengthy interviews and was very supportive of my research, giving me contacts and phoning ministerial staff for me, but this only gave me access to a couple of ministerial policy actors. I found myself having to re-sample my research participants and through fortunate networking, I interviewed high level policy actors at the Ministry of Education in the Department for Policy and Planning, the Department for Non-Formal Education and the Division for Statistics. I thus managed to interview five highly influential policy makers involved with literacy assessment and policy planning, who all gave me extensive interviews.

Further to these interviews, I had the opportunity to spend two full weeks with a key policy maker from the Ministry of Education travelling (this required written permission from the Ministry of Education for me to be an MoE mission guest) with international development partners to evaluate literacy and community learning centre programmes. Both weeks allowed for observations but also for extensive, insightful conversations with both ministerial staff and practitioners who had been working in Lao PDR as foreign experts for many years.

Though my conversations with the government policy actors were rich, I worried I was not managing to collect sufficient data, simply because there were no other people in the Ministry

⁹⁷ Most of my time at UIS was spent reading the guidelines (seven big folders) of the Programme, the test instruments, past correspondence by country from the beginning of LAMP to 2012, and any other information the LAMP team thought I should read. I was given unexpected access to anything I asked to read and my search for documents was facilitated in all ways.

who were involved in LAMP. It is for this reason that I also met up with the foreign advisors at the Ministry of Education working in the Policy Planning Department and Ministry of Education's international development partners to gain other perspectives of the Lao educational trends (even though few of the international development partners were aware of LAMP, also the case in Mongolia where the Programme has been implemented for ten years). The international development partner I was most in contact with was the German educational development agency, dvv international, which focuses exclusively on adult education and literacy. At the time of my visit, dvv international was in the process of re-writing the NFE policy in close collaboration with the Ministry of Education NFE Department. Other organizations I gained insights from were Room to Read, World Concern-Lao PDR, and *Welthungerhilfe* (German agricultural development agency). I was also invited to attend two ESWG (Education Sector Working Group) meetings which are working groups of representatives from the Ministry of Education and development partners (like UNESCO, UNICEF, ADB, WB, etc.) who work closely with the Ministry of Education in all areas of educational development.

Following my Lao PDR sampling experience, I approached my Mongolian data gathering process with a revised list of research participants. Within the LAMP team I met with the leader, the coordinator, the manager of the Programme, four data experts, and the statistician based in the Mongolian National Institute of Statistics. Although these interviewees were all part of the LAMP team, they also had other high level roles in the government ministries or institutes.

Following my experience in Lao PDR, I was also keen to speak to people covering similar roles in Mongolia as those I had met with in Lao PDR. I thus interviewed a senior member of the Ministry of Education, who was indicated as the person to talk to about statistics in education for policy, a senior member of the Ministry of Education who was responsible for policy planning and was working on the newly elected government's educational policy, and the head of the Non-Formal Education Centre (equivalent to the Lao's Department of NFE).

Also drawing on my Lao experience, I felt that by talking to local and international organizations I would gain further insights. I thus met with two local organizations⁹⁸ (the

⁹⁸ Highly involved in formal and non-formal education in Mongolia.

Mongolian Educational Alliance and World Vision), with UNICEF and the World Bank (the latter highly involved in international assessments in Mongolia).

In Mongolia, I did not have the opportunity to go on missions with the Ministry of Education, but I did travel with the LAMP coordinator to an *aimag* centre (a province centre not far from the capital city) where I met with the *aimag* head of NFE for an overview of NFE in Mongolia over the last thirty years⁹⁹, and to visit a primary and secondary school in the poor yurt suburbs of the capital city Ulaanbaatar where I met with the school director to talk about the formal school system (both of these visits were organized by interviewees who were kindly ‘trying to help me’).

I also had the opportunity to attend a two-day conference on educational policy in Mongolia organized by the Asian Development Bank and Teachers College (TC) - Columbia University. This conference not only gave me the opportunity to meet many people involved in education and policy in Mongolia, including many of my interviewees (in most cases I was introduced by Professor Gita Steiner-Khamsi from Teachers College) but also to hear the newly appointed Minister of Education, Gantumur Luvsannyam (Гантөмөр Лувсаннямын) speak about his vision for education. At this meeting, Professor Steiner-Khamsi also provided me the opportunity to take part in a meeting between ADB and high level Mongolian educationalists and other international development partners. This proved to be an insightful meeting, especially since Mongolia’s involvement in international assessments was discussed.

Further to the research settings and participants described here above, I also met with a UNESCO consultant in Bangkok (UNESCO’s regional Bureau) who was the local LAMP consultant for UIS in the Asian region. Although he had not worked closely with the Mongolian LAMP team¹⁰⁰, he was working very closely with the Lao LAMP coordinator. At the time of my stop-over in Bangkok and interview, the local LAMP consultant said he had been working on the draft ‘National Planning Report’ (see next paragraph) with the Lao LAMP coordinator and that he was due to receive it ‘any day soon’ (although he did not receive the report in the six following weeks when I was in Lao PDR). I also Skyped with a consultant who had been responsible for LAMP in Vietnam (in the UNESCO local office) as I hoped it would provide me

⁹⁹ The number of years she had been working in NFE.

¹⁰⁰ Mongolia has closer relationships with the UNESCO Beijing Office – though it was not involved in the implementation of LAMP.

with regional insights; and in Paris I met with a UNESCO member of staff who had first worked on LAMP in its early days at UIS and then worked in Lao PDR on the 'Lao National Literacy Survey' (a national assessment carried out in 2001 with the support of UNICEF and UNESCO), as I valued his perspectives from the centre of calculation (UIS) but also the periphery (Lao PDR).

3.2.6 Data generating timeline

Figure 3 here below summarizes my data gathering timeline from December 2011 until the end of November 2012. It includes pre-data gathering processes such as the University of East Anglia ethical application and clearance process, designing my methods of enquiry and interview planning, but also more practical issues such as visas, vaccinations, travel arrangements, etc. It then covers the four weeks I spent at UIS in February 2012, and six weeks in Lao PDR in May and June 2012, followed by six weeks in Mongolia in October and November 2012. These periods were arranged to meet the administrative and work commitments of my host organizations and research participants.

Figure 3. Data generating timeline December 2011 to November 2012

During my fieldwork year I kept a research diary which, finding it difficult to keep as a personal diary, I turned into a book¹⁰¹ about the reality of doing international research on a daily basis. I wrote about the everyday difficulties of getting around in an unknown place, linguistic and cultural challenges, the difficulties of managing to ‘get’ interviews, but also ethical dilemmas I faced and the joys of a great interview and insightful moments. The experience of writing a research diary allowed me to think through what was happening to me when I could not easily share my experiences with people around me¹⁰², but also to do a reflexive analysis of how my interviewees were perceiving me.

3.3 Being an investigator

In this section I discuss my experience of building my identity as a researcher, how it evolved during fieldwork and how I understood my interview participants to be perceiving me. I then discuss what the implications are for the generated data and its analysis.

Although I tried to go to my research fields and talk to my participants with a neutral approach, I soon recognized that neutrality is a difficult feeling and approach to have when researching something which has been your main interest for years. Not only did having worked at UNESCO mean I developed sympathy for the Organization and its values, but I also had sympathy for the lower-middle income countries where I was doing research. My personal values imply seeing most ‘development aid’ and Western-developed (i.e. ADB in Mongolia) policies and goals on lower-middle income countries as a derogatory mechanism in many cases. I tried to not pre-inform my research identity with my personal values, though talking with my interviewees further strengthened my feelings.

At the UIS, my former UNESCO job and the knowledge that comes with having worked at UNESCO, meant that my UIS LAMP interviewees found themselves treating me like an insider¹⁰³. This was made clear by my UIS LAMP participants who would often make comments like *‘Anyway, you know what it’s like’* after detailed accounts of recurring challenges faced at

¹⁰¹ The diary became such a personal account that for ethical reasons it would require serious editing were I to decide to share it with a wider public in the form of a book.

¹⁰² At times I did not feel happy to discuss by Skype or by email what I was experiencing.

¹⁰³ Whilst also being seen as an outsider having done what most UNESCO staff say they want to do but then never have the courage to do: leave the Organization.

UNESCO. Being considered as a partial insider may explain why I was given access to everything, including passwords to professional email accounts so I could go through anything I wanted. I did not feel that if I had been a complete stranger to the Organization, my interviewees would have given me more insightful interviews. I actually believe the contrary. Had I not known the Organization from the inside, I believe my research participants might have felt the need to portray the Organization with a greater level of 'reputation awareness', and thus potentially less informing about the questions I was trying to uncover. I will discuss this insider perception further in the 'Trust' section here below. In chapter four, I discuss my experience of researching the UIS as a centre of calculation from the inside with more detail.

In Lao PDR, I felt I was perceived as an 'international expert, closely-linked to UNESCO'. Two occasions made me perceive this during my interviews at the Lao Ministry of Education. On one occasion I was classified by one of my highest level interviewees as a 'technical assistant' and told that there would be interesting international organization work available for me if I wanted to return to Lao PDR. On another occasion I was meeting with a high level policy actor for the second time. The first time we had had an interesting conversation but on the second occasion, when I had asked him a question, he asked me to say what I would reply to the question first. I did not manage to enact my neutral researcher identity and told my interviewee how I disagreed with foreign aid and decisions taken by non-elected technical experts employed by organizations like the WB and ADB. From that moment onwards it was like speaking to a different person. His opinions changed radically. It was as if he had earlier perceived me in one way and calibrated what he had shared with me to that image, and then changed his idea and provided me with information no longer calibrated for people associated with the international organization world. The conversation that followed was more critical and richly insightful.

In Mongolia, I felt my 'international expert, closely-linked to UNESCO' perceived identity was also quite strong. On one occasion, a rather revealing moment as discussed in chapter six, I was classified as an international expert. One of my senior interviewees from the Ministry of Education asked me if I could help him find out about the present global trends in education policy.

'I need to see what other countries are doing. Are they doing school-based management? Where are they going? Where? Can you help me?' Mon#20

Until that moment I thought it was obvious I was taking a critical perspective on the issue, but I had to re-think how my origins and connections were pre-constructing my identity beyond how I was trying to build my research identity with my interviewees.

On other occasions in Mongolia, I felt quite strongly that my interviewees perceived me to be 'on UNESCO's side' and worried that my Mongolian interviewees felt 'under examination', as if I were evaluating the implementation of the Programme after ten years of participation in LAMP. I felt this particularly when I asked questions like *'How would you describe the work process with UIS? Did you feel there was space for dialogue and negotiation?'* or *'Did you ever feel the standardization guidelines did not take the Mongolian reality into account?'*

I was aware (from former interviews and document analysis at UIS) the LAMP activities and negotiation activities had not always been easy between UIS and Mongolia. My Mongolian research participants wanted me to know that there had been no problems at all and that the entire process had been a positive experience. I was provided with insightful perspectives in Mongolia, though on some occasions I perceived I was being provided an account which would be internationally respectable. This does not mean that the information being shared was not interesting, but it does mean it was more difficult to uncover the unstated reasons for joining LAMP.

The reason why I tried to identify my perceived identity was because it represented one of my main concerns. Having worked for UNESCO and accessed Lao PDR and Mongolia through UIS, I was worried that I would be associated with the Organization. Searching the unstated reasons to be part of LAMP, would be less easy if my interviewees were not willing to share information with me beyond the 'informing policy' and 'measuring the gap' rationales. Also, being aware of how your interviewees perceive you helps in analysing the information shared by interviewees, as I mention in my data analysis in chapters five and six.

3.4 Trust

In this section I explore how trust was part of my data generating in multiple ways, which I describe as an incremental processes of trust building. I discuss trust in relation to gaining access and permission to do research at UIS, and in Lao PDR and Mongolia. I then discuss how trust played an important role in the relationships I developed with my research participants and the generation of data.

Having worked at UNESCO and been in touch for work (although very little) with the UIS staff, meant that my research proposal to do a double case study on LAMP was met with a greater level of trust than would have been given to a complete stranger. My main supervisor, Bryan Maddox, held a role as advisor on the LAMP board of advisors. I assume that his close connection with the team and extensive knowledge of the Programme increased the level of trust towards me and my research by the UIS LAMP team.

This initial trust then grew as the UIS granted me permission to research LAMP and asked the LAMP Asian countries to welcome and facilitate my research. The fact that it was UNESCO (highly regarded in both Lao PDR and Mongolia) asking countries to support my research, meant that two countries out of three gave me almost immediate access and extensive support. Without the initial UIS support and trust, access to such high level policy actors and permission to research in Lao PDR and Mongolia would have been difficult (especially in Lao PDR which is new to independent researchers, especially in government settings).

The access I was granted required lengthy procedures as I needed formal permission to carry out all of the data gathering at UIS, and in both Lao PDR and Mongolia, further to permission to access confidential documents. Without determined support from the head of LAMP, I am skeptical I would have gained the levels of formal consent required for all three settings.

I initiated the gaining-access process in May 2011 (less than half a year into my first PhD year) when I got in touch with the head of LAMP to explain my research interest and ask if there would be support from UIS. A couple of months later, I was told that not only was the LAMP team interested in facilitating my research but that my research was more than welcome, as they foresaw the findings to be informative for LAMP and its future. In autumn 2011, I sent my procedural paper¹⁰⁴ to the head of LAMP and suggested I could spend a month at UIS in January 2012. A number of LAMP staff were going to be away on mission in January 2012 and it was decided I would go in February 2012. I spent the entire month in Montréal at the LAMP offices and was provided with an office where I could sit to read documents¹⁰⁵ and interview LAMP staff. Higher levels of UNESCO and UIS administration were uneasy about my research

¹⁰⁴ Known as 'transfer paper' in some universities.

¹⁰⁵ These documents could not be taken out of the UIS offices.

and presence in the UIS LAMP building¹⁰⁶ but the UIS LAMP team's level of trust and support in my work managed to overcome these difficulties with a few formalities.

I was asked to sign a 'non-disclosure agreement' (appendix B) which states that the information I have been given access to must be used with a degree of confidentiality that safeguards the copyright regulations of the test instruments. I was also given written consent to present findings in written and oral form on data I have gathered at UIS (appendix C); and the documents I copied for personal research were signed off with a degree of confidentiality which implies I am not allowed to share any of the internal UIS documents with anyone apart from my supervisors.

At the end of February 2012, it was still not clear how fast the LAMP process would proceed in Lao PDR in the following months which led to a period of unclear research design for me. It seemed as though Jamaica¹⁰⁷ would go forward and implement the Programme earlier than Lao PDR and that I should turn my attention to the Central and South American region (this would have included Paraguay, which had already implemented LAMP). And so, during my period in Montréal, I gathered data on all the LAMP countries in case I had to shift my attention to another country at the last minute. Lao PDR remained my primary focus, though Vietnam and Mongolia were added as potential back up plans in case LAMP implementation stagnated in Lao PDR.

At the end of February 2013, UIS LAMP sent three formal letters to the heads of the LAMP teams in Lao PDR, Vietnam and Mongolia (appendix D, E, F). On 11th April, I was given written consent to carry out research in Lao PDR upon the Minister of Education's agreement. In June 2012, I was informed that although the Ministry of Education in Vietnam appreciated my interest in Vietnam's LAMP implementation (suspended formally for financial reasons after the pilot assessment), they regretted to inform me that it would be difficult to support my research. On 4th March 2012, the Mongolian LAMP representative replied that I would be given any support I needed, though I had to wait for a formal letter of invitation to carry out research in Mongolia which I received on 13th August¹⁰⁸. The workload of my research participants, the

¹⁰⁶ This led to extensive work for the head of LAMP and me having to sign a modified intern contract to grant me access to the building.

¹⁰⁷ In 2014, Lao PDR had started implementing the pilot stage of LAMP and Jamaica had come to a halt since 2012.

¹⁰⁸ I was advised by the Mongolian LAMP coordinator to go to Mongolia after the elections (end of June 2012), the

administrative and formal procedures of formal permission¹⁰⁹, and the practical issues (visas, vaccinations, contacts, travel and accommodation) all had an impact on the pace of the fieldwork process.

Although I had gained formal permission from the UIS, Lao PDR and Mongolia to carry out research this was institutional trust that did not imply my research participants would trust me and feel comfortable to share their opinions with me. In all three contexts, I made the effort to meet each person I was interviewing at least once¹¹⁰ before the interview to tell them about my research and allow them to ask me any questions. In this first meeting I also told my research participants about their rights (anonymity, etc.) and tried to ensure they felt free to withdraw at any stage. This was a way to build a rapport and hopefully trust. I thought that a complete stranger would imply a lower level of trust on the part of my participants and that developing a relationship, although briefly, would raise my participants level of trust towards me (Ellis 2007; Arksey and Knight 1999).

Trust was not clearly separated between the institutional trust and my research participants' trust. I felt that both kinds fed into each other. My former position at UNESCO and the advisory

summer holidays, and the start of the school year were all over, in order for staff in the Ministry of Education to be available for interviews. Although this seemed like a long wait, it was a wise idea to wait until October 2012 when the newly elected government had had time to re-arrange a large number of government staff (thus avoiding speaking to people who would have been in a limbo position which could have resulted in interviewees being insecure of what perspective to express).

¹⁰⁹ See appendix G and H for formal permission from Lao PDR and Mongolia to carry out research on LAMP.

¹¹⁰ At UIS, I actually had the opportunity to spend two full weeks at the office with my research participants, before starting to interview them.

role of my supervisor at LAMP gave me initial institutional trust¹¹¹ which I then had to develop individually with each research participant at UIS LAMP. It was only after a month at UIS which included further trust building, that the head of the LAMP team sent formal letters to Lao PDR, Vietnam and Mongolia asking countries to support my work – a form of trust declaration so the countries knew the UIS had trusted me and that they could do the same. The countries then asked me for further details on my research project and methods. My early correspondence with them initiated a process of trust building which I further developed with my research participants before and during the interviews in Lao PDR and Mongolia. I would thus describe this gate-opening process built on steps of trust, requiring incremental processes of institutional and personal trust building to generate data in the three contexts.

Although I describe the data I collect as multiple unisubjective truths (see the next section with reference to Foucault), this concept refers to the different perspectives of the different interviewees I spoke to. Having discussed the building of trust with my interviewees, I can now differentiate among multiple perceptions given by the same interviewees which were either given as a maturation of a greater level of trust which led to informal conversations with my interviewees (either because they had asked me to turn off the voice recorder or not take notes – or because we were having an informal chat). My interviewees provided me with different representations of truth which varied from being close to the government regime of truth to entirely personal opinions my interviewees held based on personal knowledge and experiences. The significance of building trust was not about getting deeper and closer to a final, more real truth but accessing the multiple truths which are behind the participation of lower-middle income countries in international assessments. It was not the number of

¹¹¹ LAMP UIS was open to my research endeavors. UNESCO Headquarters was a little concerned about the content of the research I would put out to the general public. I did not feel any censorship measures¹¹¹ were put in place other than an agreement of non-disclosure (as discussed above). Although I did not feel ‘controlled’ in Lao PDR, the Ministry of Education worked very closely with me (including two whole weeks on mission with them) and I felt compelled to regularly inform my main Ministerial contact about where I was, what I was doing, who I was meeting, etc. I also avoided saying anything that did not pay tribute to the government (it is a one party system, and dissent cannot be expressed) and felt a little worried when I was reading books that accused the government in power. On the last day, I was asked to meet with a government official to explain what my findings from Lao PDR were, and although I had no information to hide, I was concerned about losing my transcribed interviews before getting back to my home university.

interviewees involved in my research design as much as the trust that I managed to build that gave me access to the many hidden truths. I do not choose to give the off record, informally shared truths a greater level of meaning as it is the multiplicity of unisubjective truths that together provide a more comprehensive landscape of the processes of LAMP participation. I conclude that in the research of policy and practice, the opportunity and effort of building trust by using methods that can be described as an ethnographic style, open up a greater array of truths.

3.5 Meaningful data

In this section I attempt to explain the assumptions this research project is built upon, discussing how I come to define the generated data as meaningful for this research, which includes the negotiation of knowledge between my research participants and me.

I see the knowledge I gather and interpret as the product of me as a researcher, my interviewees' perspectives, but also the questions I asked and the methodology and the theoretical framework I adopted in my data interpretation (Habermas 1978). This negotiated knowledge is based upon an understanding that the world is shaped, adapted and interpreted by all those who live and enact it (Hitchcock and Hughes 1995).

The single accounts and stories (Chambon and Irving 1999) of my interviewees in the three contexts, negotiated through the encounter between me as a researcher and my research participants (Nietzsche 1966; Begam 1996), create multiple unisubjective truths (Foucault 1974). Although this multiplicity of truths may be criticized for its non-generalizable nature, it is by recognizing knowledge as plural and kinetic that legitimizes this approach and the knowledge multiple truths produce.

By adopting a 'multiplicity of truths' (Foucault 1974) position, which resonates with Maxwell's (1992) interpretative validity approach, I argue that it is the perspectives of my interviewees negotiated by my analysis and observations that construct meaningful data or constructions of knowledge (Geertz 1973), together with the claim that the findings I reach are not a universal truth, but a multiplicity of truths or 'glimpses of truths' (Lingard 2014). I recognize that my contribution to knowledge is partial and positioned, though this does not strip it of its value.

Taking an interpretative and subjective ontological stance and valuing the uniqueness and complexity of multiple unisubjective truths (Foucault 1974), makes a strong case for adopting multiple-case-studies¹¹² (Yin 2009). Further supporting case-study methodology for this research project, Yin (2009) suggests case studies are insightful when the research questions being posed are 'how' and 'why', and when the researcher does not have power over the phenomenon happening in a real-life contexts. Simons (2009: 23) adds that case studies are particularly insightful in the case of an enquiry into programmes and policies in action as they bring in the multiple and contested perspectives of all the actors involved, helping to clarify why things appear to have happened the way they did.

Multiple case studies (Yin 2009) of the same Programme in Lao PDR and Mongolia allow me to value:

- The multiplicity of participant perspectives which provide richness which may articulate the unstated reasons for joining international assessments;
- The real-life context within which the global project is 'becoming alive' and the opportunity to experience it with my research participants as we negotiate meaning;
- Two very different national realities involved with the same global Programme, apparently for the same rational reasons (education benchmarks and data to inform policy) and elements of comparison which help highlight subtle issues not identified as in the other case study.

¹¹² For further clarity, I adopt the case study definitions of Yin (2009) and Simons (2009), although I recognize that these definitions are not holistically representative of the complexity of case study research:

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. Yin 2009: 18

Case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme or system in a 'real life' context. It is research-based, inclusive of different methods and is evidence-led. The primary purpose is to generate in-depth understanding of a specific topic (as in a thesis), programme, policy, institution or system to generate knowledge and/or inform policy development, professional practice and civil or community action. Simons 2009: 21

Case studies have been extensively criticized (Smith 1991) mainly for being micro-focused and thus leading to over-emphasizing detail (Stake 1978), even though this is a risk with most qualitative data. Although this research approach may be criticized for producing narrowly micro-sociological perspectives and thus open to the suggestion that the 'uniqueness and distinctiveness' of the data produced is a weakness, I choose to value the richness of multiple unisubjective truths and the insights they offer since the nature of my research question focuses on uncovering the unsaid.

Other criticisms of case studies include participant sampling being non-representative, findings not being easily generalizable, and the risk of partial reporting which creates 'selective, biased, personal and subjective' data (Cohen, Manion et al. 2013). Although I appreciate this concern, I believe that by clearly stating what this research specifically uncovers rather than making generalizations, may not only reveal rich insights but also produce findings that would be difficult to reach with a less detail-seeking methodology.

A multi case study research methodology has allowed for an element of comparative analysis (Landman 2008), as a way to understand how different contexts respond differently to the participation in international assessments. For example, it has been interesting to note that both Lao PDR and Mongolia have projected statistical eradication strategies into LAMP, but also that only Lao PDR intends to 'scandalize' with the data to access greater foreign development aid (as seen in chapter six).

3.6 Ethics

In this section I discuss a series of ethical issues I faced during my data generating process but also during my data discussion chapters - in particular in chapter six when I briefly discuss unaccountable and opportunistic elements which often complement the rationales for joining international assessments.

The first ethical dilemma is a complex issue which I have frequently been asked about at conferences. *'How are you ethically bound to the institutions that have facilitated your research?'* Technically the answer might be rather straight-forward. I signed a contract of non-disclosure of internal LAMP documents and a document which allows me to publish and present on my research on LAMP. Apart from these formal relationships I am not restricted in the processes I describe and the findings I reach. However, research relationships are not only

about legal contracts. The gratitude I owe to the Organization and the Institutions for supporting my research together with the relationships I developed with my research participants influence how I discuss the Organization and the Ministry of Education staff in Lao PDR and Mongolia.

At UIS, I felt so welcome and supported by the LAMP team that it made me feel closely connected to my research participants and through our lengthy conversations about LAMP I came to share their enthusiasm for the Programme and their concerns about its future. Although I tried to maintain a detached approach and not get involved emotionally, I cannot deny that I developed strong feelings about what was happening around me and to the Programme.

In Lao PDR, once again I felt very welcome and supported. Although I was as absorbed as I could be in getting to know the culture, it took me a while to adjust to a completely different culture (making contact, building rapport, etc.) and to understand basic cultural and social dimensions of which I was unaware¹¹³. After a short period in Lao PDR, I started to feel a sense of frustration towards international organizations 'doing development' in Lao PDR whilst taking over a lot of decision-making at government level (especially those providing aid). I then slowly developed a feeling of frustration towards many of the Lao who were allies of this development game which was blatantly the main producer of inequalities¹¹⁴. Although I felt a similar feeling in Mongolia, the level of foreign aid dependency is decreasing leaving Mongolians with a stronger hold over national decision-making.

The reason why I believe it is important to explain how my feelings evolved is because they influence how ethically bound I feel towards the countries and institutions and their need to maintain a positive reputation. This does not mean I am not in the position to take a critical stance in my research, but it does mean that I care not to go beyond what I feel is a level of ethical respect and that my findings be constructive.

¹¹³ I.e. that showing any skin below your neck or showing your shoulders made Lao people feel uncomfortable (though I was wearing what in Europe would be considered conservative), that people prefer telephoning and that it can take weeks for people to reply to emails, that women are by law required to wear the traditional Lao skirt (*sinhs*) in governmental institutions (though it is not compulsory for foreign women).

¹¹⁴ As one person who has been in Lao PDR for a long time told me, 'the only thing that has changed is the car park, there were no cars when I arrived and now it's all cars no one could afford with the local salaries.'

Out of the three contexts, I felt Mongolia was the one where my interviewees were less open to providing multiple truths other than the official truths, which means I am in an ethically less sensible situation when discussing my data. As regards Lao PDR and UIS, there is information that has been shared with me that for the sake of my interviewees and the institutions that host them, I feel ethically bound to caution in my data discussion. Although I take a critical approach to the study of international assessments, I also maintain a moderate level of ethical respect towards my interviewees and their institutions.

Another ethical challenge I faced involved the formalities of carrying out interviews. It was my intention to provide all my interviewees with the letter of information on my research and the informed consent form¹¹⁵ by email (and in paper during our first rapport and trust building meeting), further to briefing my interviewees on their rights as research participants before the interview. This process was less straight forward than I had imagined.

My 'informed consent' forms had to be approved by UIS administration and then it took weeks for my UIS interviewees to sign them¹¹⁶. All my interviewees allowed me to voice-record their interviews (although not all of my interviewees were comfortable with this and allowed it out of sympathy so I did not have to write out everything as they spoke).

Things changed drastically in Lao PDR. None of my research participants felt comfortable with signing an informed consent form and no research participants allowed me to record the interviews. I should have imagined this would be the case, in a country where freedom of speech is not practiced and where people have been punished for not sharing the government values (i.e. jailed or disappeared after protesting recently, or 'corrected' in the re-educational camps in the 1970s and 1980s). I felt uneasy not having signed forms of consent and would have continued to ask my interviewees, had I not had a very unpleasant interview with an interviewee (though interestingly not a Lao person) who became verbally aggressive after I sent him an informed consent form. It was an unfortunate situation since this research participant was in the position to provide a significant interview. It was after this experience that I had a long discussion with my supervisor on Skype and decided that oral consent, no voice-recording and more natural conversations (as far as possible) were the way ahead.

¹¹⁵ See appendix I.

¹¹⁶ I thus wondered if they were to some extent uneasy with the process since signing documents at UNESCO is never a straight-forward process.

I carried my interview concerns and regrets about having missed a precious interview in Lao PDR to Mongolia, and continued with the process of oral informed consent and no voice-recording (meticulously writing everything down) though it is likely that a number of my interviewees in Mongolia would not have minded the original interview designed formalities (as one of my interviewees suggested when we met for a chat about my data gathering experience in Mongolia).

As a continuation of chapter three on my research methodology, this methodological chapter provides a more theoretical framework, as it frames my research methodology with Actor-Network Theory concepts and assumptions.

In this chapter I first aim to familiarize the reader with Actor-Network Theory (ANT) by introducing ANT and a selection of relevant concepts and assumptions. Secondly I aim to explain how ANT can be applied, by clarifying my choice of ANT as an insightful analytical framework and describing how it has framed the development of my research questions, methodology and data analysis. I explain how I apply a selection of ANT concepts to theorize the participation of Lao PDR and Mongolia in LAMP. Finally, I discuss the limits of ANT in relation to the use I make of it and articulate conceptual contributions my study makes to ANT.

Together with chapter three, this chapter allows the reader to evaluate the data generated and the conceptual instruments that have orientated my understanding of the data as it was being generated and interpreted.

In the second half of the Eighties, Bruno Latour (1988), John Law (1986) and Michel Callon (1986) each published papers enquiring into the properties of actor-networks within the field of Science and Technology Studies¹¹⁷ (STS), to focus ‘on the social and institutional processes that accompany technological innovations’ (Hamilton 2012: 13), changing the way non-human entities had been considered in social theory until then. This ‘adjustment’ in the social sciences made non-human entities¹¹⁸ social-compatible (Latour 2005: 10) by giving them agency and attributes which come into existence through relations with other entities. In fact, the hyphen between actor and network is there to remind us of the importance of non-human actors

¹¹⁷ ANT is no longer only applied to the study of STS but has been used in most fields of research, both scientific and humanistic. It is also used by scholars researching education (Fenwick and Edwards 2010), and closer to my field of enquiry, Hamilton (2011) has applied ANT to policy analysis and media responses to international assessment data (2014), Gorur (2013) to the development of international assessments and Maddox (2014) has applied it to ethnographical research of international test item development.

¹¹⁸ For example scallops, microbes, ships (as discussed in the first ANT papers by Callon, Latour and Law).

when part of networks¹¹⁹. Latour argues that the sustenance of an entity is distributed in networked 'swarms of entities' (2011: 2).

Considered an empirical version of post-structuralism (Law 2007), ANT is also known as a 'material semiotics' (Law 2008). Although its name may suggest it is a theory, its founders argue against it being a theory and state that it is 'a purely conceptual term that means that whenever you wish to define an entity (an agent, an actor) you have to deploy its attributes, that is, its network' (Latour 2011: 5). In other words, it is best understood as a methodological framework of enquiry which describes the deployment of associations, by looking at how heterogeneous alliances fold and unfold in the creation of things, facts, ideas and practices¹²⁰.

Law states that 'Actor-Network Theory is a disparate family of material-semiotic tools, sensibilities and methods of analysis that treat everything in the social and natural worlds as a continuously generated effect of the webs of relations within which they are located. It assumes that nothing has reality or form outside the enactment of those relations. Its studies explore and characterize the webs and the practices that carry them' (Law 2009: 141).

ANT is also defined as an uncritical descriptive method of enquiry, as 'it follows the actors' into the laboratories where facts and things come to life through alliances. It is this very process of coming together as an alliance which ANT sets out to describe by following the principles of agnosticism, generalized symmetry (which means all actors have equal agency and that differences are produced through their interactions) and free association. These imply that descriptions are impartial, with no judgment expressed by the researcher nor any viewpoint preferred over others; conflicting viewpoints are explained in the same terms; and there are no a priori distinctions between natural and social.

ANT rejects classifications and dualisms by refusing the traditional social divisions between nature and social, context and content, agency and structure, human and non-human, true and false, micro and macro, local and global, close and far, up and down, big and small – they are

¹¹⁹ ANT does not suggest non-human actors have individual, intrinsic agency and human consciousness and intentions.

¹²⁰ Or in Shilling's words, 'assemblages of nature, ideas, individuals, technologies, that are patterned, enacted and maintained in specific ways; ways ordinarily open to contestation and change' (2012: 99).

the two sides of the same coin, embedded within each other and replaced by an ontology of associations and connections:

Three resources have been developed over the ages to deal with agencies. The first one is to attribute to them naturality and to link them with nature. The second one is to grant them sociality and to tie them with the social fabric. The third one is to consider them as a semiotic construction and to relate agency with the building of meaning. The originality of science studies comes from the impossibility of clearly differentiating those three resources. Microbes, neutrinos or DNA are at the same time natural, social and discourse. They are real, human and semiotic entities in the same breath. The article explores the consequence of this peculiar situation which has not been underlined before science studies forced us to retie the links between these three resources. The actor-network theory developed by Callon and his colleagues is an attempt to invent a vocabulary to deal with this new situation. Latour, 1996b: 1

ANT's ontological stance implies the world can be seen through connections and interrelations – and for this reason it has also been called a 'sociology of associations' – which gives non-human actors their identity and agency. ANT's *actants* enact their network-adapted identities through their relationships and interactions. These alliances are not to be described as networks of containment but as relationships of connection (Faik et al. 2011) in 'a complex ecology of tributaries, allies, accomplices, and helpers' (Latour 2011: 4).

ANT sees social projects as unstable and their durability acquired through the enrolment of actors. According to Law (1999) there is no given, permanent social order but 'order' is plural, materially heterogeneous, ephemeral and constantly remaking itself through the processes of network translations. Law states that ANT 'is a sensibility to the messy practices of relationality and materiality of the world' (2007: 2).

So what does the world look like from an ANT ontology? It appears fluid, chaotic and heterogeneous; ordered by social projects in constant flux which come together temporarily and then disassemble in what I describe as a *web of multiple alliances* (discussed in the last section of this chapter). Hamilton suggests ANT sees society as a fluid society in which 'projects of social ordering compete for legitimacy or influence' (2012 : 10).

According to ANT, facts are not intrinsically true or false, but their truthfulness and falsehood are acquired through the human and non-human actors (i.e. in the case of the production of scientific knowledge one would consider the scientists, academic papers, journals, references, research projects, etc.) who join an alliance to produce a fact and maintain it as true. The concept of validity and success are challenged by ANT which sees such states achieved through the mobilization of allies, rather than measured against pre-established criteria (this is discussed in chapter five, where I argue that LAMP's validity is assembled rather than pre-existent).

My first encounter with ANT

The first time I encountered ANT was during my first year of PhD studies, when I was recommended reading Bruno Latour's *Aramis or the Love of Technology*. My supervisor had just read it and was keen on the parallels between Aramis and LAMP (although we take different perspectives and apply different methodologies, we share a research interest in LAMP).

Aramis, the public-but-private, rapid transport system project developed in Paris in the 1970s and 1980s, is told as a detective story which sets out to discover 'who killed Aramis'. It is told in parallel by a sociologist who follows the human and non-human actors involved in the Aramis alliance, as they fold and unfold.

The life of Aramis is a hard one – his life is in the hands of the alliance that has assembled around him – as his allies support him when they believe the Aramis alliance will further their interests, and leave when they see Aramis no longer serves them. The methodological and conceptual challenges that Aramis faces to 'come alive' do not explain his success and failures - what counts are his allies whose commitment to the alliance can overcome any challenges. His life goes through various dips in terms of alliance stability (once again this is not related to the costs and difficulties Aramis faces) before finally dying when his allies no longer feel he serves their interests.

The notion of heterogeneous alliances, non-human actors, piggy-backing interests, and the meaning of success and failure in ANT came out through the story, and became 'a pair of glasses' through which I started to analyse the world around me. When I applied the Latourian framework of analysis and its concepts to the process LAMP participation, I uncovered insightful perspectives. I then went on to read more of Bruno Latour's work, but also Michel Callon and John Law's main writings on ANT, and the interpretation of other scholars using ANT (whose applications helped me understand ANT further).

4.1 ANT's conceptual resources to understand LAMP participation

In this section I give an overview of ANT concepts which act as a set of conceptual and methodological tools of analysis that allow me to follow the actors in the LAMP alliance-folding and unfolding processes. Before looking at how I apply these concepts to my research question and data analysis (in the next section), I clarify the meaning of non-human actors, translation moments and 'piggy-backing', black boxes, centres of calculation and *in actu* power.

4.1.1 Non-human actors

As mentioned in the introduction to ANT, it is the appearance of non-human actors with the need to account for technological innovation in STS that led social theory to split into theorists who reject and those who attribute agency to non-human actors. Actors in ANT associations, also known as *actants*, are 'anything provided it is granted to be the source of an action' (Latour 1996b: 7). They can be humans but also non-human things like texts, written facts, machines, artifacts, software programmes, statistical models, implementation manuals, national development plans, signatures, and so on; and are often considered the allies who give networks the most durable elements in that they are less inclined to change opinions and objectives, and often embody the objectives of the network (i.e. testing instruments). Law states 'that social arrangements delegated into non-bodily physical form tend to hold their shape better than those that simply depend on face-to-face interaction' (2009: 148) and that it is 'the configuration of the web that produces durability. Stability does not inhere in materials themselves' (ibid).

4.1.2 Moments of translation

The ANT concept of translation has both a linguistic and a geometric meaning, as Latour explains that 'in addition to its linguistic meaning (relating versions in one language to versions in another one), it has also a geometric meaning (moving from one place to another). Translating interests means at once offering new interpretations of these interests and channeling people in different directions' (1987: 117). Translation is the processes of negotiation of identities, representation and displacement of interests and objectives (Murdoch 1998) which allow actors to develop relations and establish a network. Latour and Callon describe it as 'all the negotiations, intrigues, calculations, acts of persuasion and violence, thanks to which an actor or force takes, or causes to be conferred on itself, authority to speak or act on behalf of another actor or force' (1981: 279).

Callon (1986) breaks the translation process down into four moments¹²¹: *problematization*, *interessement*, *enrolment*, and *mobilization*. These moments are never entirely completed as associations are considered to be in constant fluctuation, with actors leaving and enrolling

¹²¹ These four moments are not necessarily consecutive and can easily overlap.

without the assemblage necessarily coming to an end. Callon's moment of translation can be described as follows:

Problematization is the process during which one actor, referred to as a focal point initially and at a later stage as an 'obligatory passage point', becomes uncontested in defining a situation (usually a problem), delimiting the nature and interests of other actors who could join the network, and establishing himself as indispensable for the achievement of all actors' goals.

Interessement is the process during which the focal point requires other actors to accept their network-adapted identity and come to accept ('are locked into place' according to Callon 1986: 8) the focal actor as an 'obligatory passage point' through which all network relations need to go. This process includes weakening connections with other actors and alliances (i.e. other potential alliances in the *web of competing alliances*).

Enrolment is the process in which the former two processes are defined, agreed and formalized. This may be considered the first binding stage of the network when actors actively share the aligned, overarching interests of the network they join in which they perform their newly adapted identities.

Mobilization is the process by which the 'obligatory passage point' (and in some cases also other actors) establishes itself to represent the collective and speak with one voice in unison for the whole network – the so called 'legitimate spokesperson' in ANT jargon – thus silencing the other actors. It is suggested that this is the moment when black boxes (temporarily accepted truths) are closed and thereafter given for granted.

During the translation stages, identities and black boxes are negotiated and sealed, although Law states that 'An actor is always a network of elements that it does not fully recognise or know: simplification or 'black boxing' is a necessary part of agency' (2007: 8). We shall see in chapter five and six that Law's statement, whether the actors fully recognize the elements voluntarily or not, helps understand the LAMP allies in their enactment of the assemblage.

The issue of identity transformation and adaptation is a delicate process that takes place during the moments of translation – on the one hand actors take on a new identity which has been negotiated according to the purposes of obligatory passage point, but on the other it is an identity which has been fitted around all the actors in order for everyone's interests to be

advanced. This implies that although identities are transformed, individual interests are maintained. The alliance is thus based on cooperation, mutual support, and defended by all actors who believe the alliance furthers their interests.

4.1.3 Piggy-backing

Although Actor Network Theorists argue that by describing the how they explain the why, ANT is criticized for focusing on the *how* and not answering the *why*. I argue that ANT's 'piggy-backing' assumption does help explain the why in the application of ANT to my research questions¹²². There is an underlying theory in ANT suggesting actors join an assemblage in its drive towards the overarching, aligned aims of the alliance, in order to serve and further their own interests. Latour (1987) calls this 'piggy-backing'.

The point here is that the easiest means to enroll people in the construction of facts is to let oneself be enrolled by them! By pushing their explicit interests, you will further your own. The advantage of this piggy-back strategy is that you need no other force to transform a claim into a fact; a weak contender can thus profit from a vastly stronger one. Latour 1987: 108

The multiple interests which drive an alliance do not represent a barrier even when the actors' interests are in contradiction, as emerges from my application of ANT to the LAMP process. Latour suggests 'you have to pass through the contenders position and help them to further their interests' (1987: 121). Mosse (2004) suggests that dominant, stable policies are driven by the greater number of interests tied up under the same policy interpretations, which are the result of successful '*enrolment*' even when they are 'supported for different reasons and serve a diversity of perhaps contradictory interests' (2004: 647).

Law takes the contradictory interests further, stating that a coherent and harmonized alliance is not the common state of an assemblage.

We have seen how the studies of actor-network theory 1990 describe the more or less precarious generation of realities. Mol has pushed this logic one step further by washing away a single crucial assumption: that successful translation generates a

¹²² This is important considering my main research question is 'why do countries participate in international assessments?'

single co-ordinated network and a single coherent reality. Any such coherence, if it happens at all, is a momentary achievement. The logic is Serres-like: most of the time and for most purposes practices produce chronic multiplicity. They may dovetail together, but equally they may be held apart, contradict, or include one another in complex ways. How do different realities relate together? How might we think of these partial connections (Strathern: 1991)? And then, a new question, how might this patchwork of realities be enacted in better ways? These are the questions that arise if we combine the insistence that realities are enacted with the discovery that they are enacted differently in different places. Law 2009: 13

It has also been suggested that alliances use a vague, all-encompassing language that can be translated into the many different languages of the actors involved, to allow actors to project their own interests into the overarching interests of the alliance (Latour 1996).

Clearly common narratives or commanding interpretations are supported for different reasons and serve a diversity of perhaps contradictory interests. The differentiation of practical interests around 'unifying' development policies or project designs is a consequence of successful enrolment, and a condition of stability and success. But it also requires the constant work of translation (of policy goals into practical interests; practical interests back into policy goals), which is the task of skilled brokers (managers, consultants, fieldworkers, community leaders) who read the meaning of a project into the different institutional languages of its stakeholder supporters. Mosse 2004: 647

Policy discourse generates mobilizing metaphors ('participation', 'partnership', 'governance', 'social capital') whose vagueness, ambiguity and lack of conceptual precision is required to conceal ideological differences, to allow compromise and the enrolment of different interests, to build coalitions, to distribute agency and to multiply criteria of success within project systems (cf. Dahl, 2001: 20; Li, 1999)' Mosse 2004: 663

4.1.4 Black boxes

In chapter five and six, the chronic multiplicity and the vague malleable language of alliances represents a key strategy in the black boxing of temporarily accepted truths of the LAMP assemblage.

In order for the translation process to create a stable network and establish relations amongst the involved actors, a set of previously unstable truths need to be stabilized and accepted by all actors, black boxed and defended. These then become taken for granted, underlying assumptions upon which the network is built and as long as the black boxes remain beyond contestation, the network will be stable. If actors decide their interests would be furthered better within networks in the *web of competing alliance*, black boxed tacit knowledge may be questioned.

If people wished to open the boxes, to renegotiate the facts, to appropriate them, masses of allies arrayed in tiers would come to the rescue of the claims and force the dissenters into assent; but the allies will not even think of disputing the claims, since this would be against their own interests which the new object have so neatly translated. Latour 1987: 133

It is in the interest of the researcher to open the black boxes (though this does not imply breaking apart the network) to explain the processes through which the actors are assembled. I draw on the concepts of black boxes in chapter five (identifying five main concealed truths of the LAMP assemblage) to explain spaces of ambiguity in the assemblage which are deliberately obscured (a paradox for an assemblage whose acronym (LAMP) stands for 'light'). The obscured nature of the black boxes is a crucial aspect of LAMP (and other international assessments) which are ensured by secrecy mechanisms (i.e. legally binding agreements of non-disclosure) and complex statistical procedures which act as gatekeepers of the sealed black boxes (making it either illegal or challenging to question the truths the assemblage is built upon).

4.1.5 Centres of calculation

Within actor-networks, Latour (2011) refers to actors as 'nodes in wider social and material linkages' (Shilling 2012: 97) which are not autonomous from one another once they join the

alliance. One or more of the alliance actors become key nodes in the network and are called 'centres of calculation' (Latour 1987). They make decisions at a distance and stabilize identities at the periphery from the centre, thus bringing 'the local to the centre' (Murdoch 1994: 17). According to Murdoch, the centre of calculation produces a 'legitimate representation' which is derived 'from the incorporation of the participating households within a common form of calculation and the stabilization of certain elements of the household as they move through the processes of translation. Likewise the social surveys reduce varied actors to questionnaires which are then brought back to the research centre and translated into tables, texts, etc.' (1994: 16).

This implies that centres of calculation (the key nodes in the network) 'make the world calculable and controllable' (Rottenburg 2009: 87) and 'produce new knowledge by bringing things together that in reality only exist in separate locations' (ibid: 181) and thus depends on the knowledge being an accurate representation. Rottenburg states this can be achieved through mobility, immutability and combinability and transferred through a metacode (accepted by all the actors in the alliance) that implies standardization. Applied to LAMP, the UIS acts as the centre of calculation by determining the calculation procedures which transform the messiness of plural literacy practices into a universal measurable fact valid for all its allies. It appears that the centre of calculation thus manages and regulates power by countries handing over their sovereignty in determining their own literacy reality.

Latour describes the centre of calculation engaged in a cycle of accumulation of distant information which is brought back to the centre of calculation and made familiar (Latour 1987: 220). This is achieved by rendering the data mobile (so they can be brought back), stable (so they can be moved backwards and forwards without this process ruining the quality of the data) and combinable (so whatever is being brought back can be aggregated).

The complexity of literacy is scaled down to *a* literacy (Hamilton and Barton 2000) that is measured with tools that accurately categorize it into facts represented along a continuum. This is a form of 'domestication' of the information (Latour 1987: 218) which renders the complex, local literacy practices mobile, making it possible for it to be transported back to the centre of calculation, and compared across countries (bringing back and forth across countries and aggregated in league tables). It is only by transforming literacy practices into ticked boxes that they become stable, aggregated facts and can then be compared across countries, one of

LAMP's objectives. Literacy is thus translated by the alliance from a social practice into a numerical fact.

This re-representation of complex literacy practices requires an assemblage of actors working together inside LAMP's centre of calculation. In the centre of calculation there are experts of calculation, computers with complex statistical programmes, testing instruments, guidelines for translation, implementation manuals, advisors who meet every year to discuss LAMP challenges and take decisions, filed correspondence with all the actors involved, signed memorandums of understanding, contracts with ETS and other testing consultancy agencies involved in the development of LAMP, but also data that has been collected to pilot the instruments and data that has been collected to provide countries with facts on their literacy levels. All the human and non-human actors are involved in turning the pilot and main assessments into meaningful, manageable data which, as Latour states, 'bring together element which are nevertheless not there' (1987: 234).

But what was it like to sit within this assemblage of human and non-human actors at the centre of calculation as I researched them and they calculated and re-represented? It appeared that I had been given open access to all documents I asked to read but also that my interviewees took pride in uncovering elements of the calculations that provided them with ethical dilemmas, leaving me their computers (which included all the calculation materials, documents, traces of LAMP's life, etc.) and passwords to email accounts. At the same time, meetings were held to which I was not welcomed. In the apparent openness to my enquiry, some doors were kept closed as tensions and preoccupations regarding the representation of literacy were being dealt with. The meetings were about writing the analysis (and thus interpretation choices) of the LAMP data in an international report but also another challenge I was aware of because the data kept on being delayed. My interviewees were faced with calculation challenges in terms of rendering their LAMP representations stable. Solutions had to be found and for the credibility of the data and the centre of calculation, I presume it was best these discussions and decisions were kept secret. At the time, I simply wondered why I was being kept out and found myself challenged by my researcher needs and their need for secrecy. It felt uncomfortable, especially since it contrasted with the openness I felt in all other circumstances during my four weeks at the centre of calculation.

4.1.6 *In actu* power

The concept of obligatory passage point (during the translation moments), which in the case of LAMP then smoothly goes on to act as a 'centres of calculation', leads us to the notion of power in ANT associations. Law and Whittaker (1988) state that power belongs to the actors who enroll (through obligatory passage points) and thus exert power (*in actu*) through the action of other actors – as opposed to power that can be 'had' (*in potentia*). Murdoch describes 'Those who are powerful are not those who 'hold' power but those who are able to enroll, convince and enlist others into networks on terms which allow these initial actors to 'represent' all the others' (1994:15).

Understanding power relationships in ANT thus means describing the way in which actors are defined, associated and obliged to remain faithful to their alliances. In ANT, translation is the mechanism by which the networks progressively take form, resulting in a situation where certain entities control others. The translation model of power (Callon 1986) presents a successful command as resulting from the actions of a chain of agents, each of whom translates or shapes it according to their own objectives. Those who are powerful are not those who hold power in principle but those who practically define or redefine what holds everyone together. Heeks and Stanforth 2011: 6

Power remains a complex notion in ANT and it is through the concept of network that ANT also makes sense of power. It is seen in terms of durability and a stability of the network. One could argue that power is also given by collective action and relations, and it is thus measurable by enquiring into the association durability, strength, and an association's number of allies (Faik et al. 2011), thus making all actors in an association potentially equally powerful (Latour 1987). Power is not centralized by the centres of calculation and obligatory passage points (no one actor can determine the future of the association), but neither is power equally distributed (some actors play a greater role than others, enrolling actors or contesting black boxes) (Bennett 2005).

In my analysis of how power exerts itself in the LAMP process, I also draw on Flyvbjerg (1998), who puts forward the proposition that power exerts itself by defining rationality and knowledge, and thus what counts as reality. I apply this to LAMP, and other international

assessments LAMP is based upon. From this perspective, I argue that by turning literacy practices into internationally comparable facts and producing a new form of representation, LAMP exerts power by defining what counts as literacy and numeracy (and thus ways in which reality is perceived) and as a consequence shapes a global literacy discourse.

From an ANT analytical perspective, it should be added that this power to shape reality is not, as Law and Whittaker (1988) state, 'had' (*in potentia*) but it is continuously 'in the making' by being exerted by enrolling actors and the allies who maintain the alliance black boxes closed. What is even more significant in this argument is that Flyvbjerg (1998) adds that rationality, as a discourse of power, is context dependent. Applied to this case, I suggest that although LAMP is global (and Caucasian as my interviewees stated) in its embryonic state, when it comes alive in the different implementing countries, the literacy reality and discourse it defines are also context specific. Each implementation of LAMP thus defines a reality and discourse that counts within its own 'subsystem' (Luhmann 1995 and 1997). Each LAMP implementation uses LAMP's power to define the literacy reality and its discourse that serves the local agenda (in this case Lao PDR and Mongolia's agendas). In chapter six, I draw on Flyvbjerg's conceptualization of the power to analyse LAMP's defining of local realities and discourses, to discuss the governmentality practices which LAMP used for.

4.2 An ANT methodology frame to enquire into LAMP participation

Having familiarized the reader with ANT, this section discusses how adopting an ANT framework and its conceptual tools, frame my research question, my methods of data generation, data analysis and discussion. With this discussion I seek to point out the main contributions that ANT can offer this research project.

The descriptive sociology of ANT which I had extensively engaged with during the formulation of my initial research questions, informed my research question and sub-questions as they emerged through the unexpected dimensions of the LAMP process which I was faced with during fieldwork. For example, trying to understand the reasons why countries join an assemblage, how the identities are modelled and negotiated around LAMP's claims, how LAMP's narratives serve different even conflictual interests, how the allies' interest is in the process rather than the outcomes, are all questions which are informed by an ontology of associations and connections, and the underlying theories in ANT.

In terms of my methods of enquiry, ANT's preferred form of data gathering (the so called 'following the actors') was difficult to use. Although I intended to observe my actors enacting the LAMP assemblage and their assemblage-adapted identities, the PhD timeline did not allow me to follow my actors at their pace. As I will discuss in chapter six, the fact that there were no activities to follow, is meaningful in the discussion of Lao PDR and Mongolia valuing the process versus the outcome.

The contributions ANT offers to my research project are best seen in the way it informs my data analysis and discussion. In chapter five and six I apply: (i) the principle of generalized symmetry to understand the claims LAMP makes and how they are enacted by the countries joining; (ii) ANT's doing away with geographical distances and substituting them with associations which smooth out the global and the local into one dimension; (iii) the common narratives within which different institutional interests can be negotiated; (iv) the concept of black boxing and piggy-backing conflicting views and interests; and (v) the notion of assembling. I discuss each of these contributions here below.

Given the little engagement my interviewees expressed with LAMP's policy claim, I valued the opportunity given by ANT to attribute the principle of generalized symmetry to all actors involved, as it helped me understand the participation process through LAMP's non-human actors. The principle of symmetry in ANT helps explain how an assemblage is tied down to dimensions which the human actors may no longer engage with. In LAMP's case, its claims are constructed and tied down by its testing instruments and working documents, without which LAMP's claims would have appeared weak. For example, by understanding how the durable allies construct the identity of the LAMP assemblage with its standardization/diversity and policy claims helps understand the tensions which allow the assemblage to further the contradictory interests of all allies.

The ANT lens also helped solve the issue of how to deal with the global versus the local, which ANT does away with – 'the notion of network helps us to lift the tyranny of geographers in defining space and offers us a notion which is neither social nor "real" space, but simply associations' (Latour 1996b: 5) – and allowed me to engage with the LAMP assemblage as a highly connected global entity 'which remains nevertheless continuously local' (ibid: 6). Latour argues that 'the first advantage of thinking in terms of networks is that we get rid of "the tyranny of distance" or proximity; elements which are close when disconnected may be

infinitely remote if their connections are analyzed; conversely, elements which would appear as infinitely distant may be close when their connections are brought back into the picture' (ibid: 4). Applied to the LAMP assemblage, the countries and the centres of calculation are no longer separated by thousands of kilometres, but its redistributed nodes that are scattered around the world are closely connected through its associations. What does this mean when analysing my data?

The LAMP assemblage, even with its global standardizing of literacy practices is continuously local as countries pick it up, negotiate the assemblage, their identity, the LAMP's claims, and governmental strategies LAMP can serve. At the same time, the centre of calculation is no longer only global but also local in its enacted identity as its associations partake in negotiating its role.

In chapter five I draw on the concept of black boxes to understand how the multiple actors involved in the LAMP assemblage settle on understandings and truths that have been negotiated into the LAMP actor identities but which appear contradictory to the overarching assemblage objectives. The concept of black boxes helps understand how the temporarily accepted truths have either been formulated in a malleable language to represent the identities and interests of all allies or that multiple truths have been sealed and built into the assemblage. Coupled with the concept of piggy-backing, ANT helps understand how but also the reasons why these multiple truths and contradictory interests can co-exist in the LAMP assemblage (a chronic multiplicity as Law 2007 calls it).

ANT also helps make sense of the construction and use of 'valid data' which plays a crucial role in the enrolment of actors and existence of the LAMP assemblage. In chapter five I use ANT's heterogeneous assemblage understanding to theorize the construction of valid data as an assembled dimension of LAMP data, which suits the specific case better than the application of other theoretical conceptualizations of validity (Newton and Shaw 2014).

After discussing the LAMP assemblage actors coming together by converging around a language of convergence (discussed in chapter six), I discovered a chapter in *A Sociology of Monsters* by Michel Callon in which ANT makes the case for the concept of convergence, to describe how actors 'fit together despite their heterogeneity' (1991: 148). The complex translation processes in which the actors weave themselves together (with their individual

interests, projects, desires, strategies, reflects and afterthoughts – Callon 1991: 143) can result in irreversibility or convergence – in the former case the translation can become *traduttore-traditore* (literally ‘translator-traitor, ANT suggests the translation phases are a step away from treason) in which the actors do not accept their re-defined identities. In the case of convergence the translation results in a shared space of commensurability and equivalence. The greater the alignment among actors, the more the actors work together (Callon 1991: 148). I argue that this process can occur through a *language of convergence* which allows actors to align their identities whilst maintaining a low level of *enacted convergence* – as is the case of the LAMP assemblage actors which meet through the ‘better data’ claim (discussed in chapter five).

ANT highlights how actors perform their identities, by enacting and giving form to their network-defined identities (Law 1994). As allies of assemblages, actors perform society by making the assemblage piggy-back their individual interests. This implies society is constantly in the making as its elements are being performed (Fenwick et Edwards 2014) into being in multiple social projects (Latour 2005). Applied to LAMP, I describe how the LAMP human and non-human actors perform their adapted identities as they enact LAMP’s claims and strive towards their own interests.

4.3 Applying ANT to an investigation of LAMP participation

In this section I look at the application of ANT to LAMP to give the reader an understanding of how ANT’s conceptual tools are a theoretical methodology which help enquire into the process of joining and being part of LAMP in Lao PDR and Mongolia. I discuss how ANT’s analytical framework sheds light on the process of LAMP assembling by looking at LAMP’s assemblage actors, how actors are translated through Callon’s four moments of translation, what multiple truths are stabilized into LAMP’s black boxes, how non-human actors enact agency in the LAMP alliance, how the UIS acts as a centre of calculation, how power can be understood in the LAMP assemblage, and how the strategic ‘piggy backing’ of interests works through LAMP.

4.3.1 LAMP’s allies

From ANT’s ontological perspective LAMP is an alliance whose actors’ attributes are defined by the relations and connections established by being part of LAMP. The actors in LAMP spread out widely making LAMP a thickly populated, heterogeneous assemblage. Among its actors

there are all those working on LAMP at UIS and the LAMP teams in the Ministries of Education in Lao PDR and Mongolia but also the non-human actors which they belong to, the UNESCO Institute for Statistics and its mother Organization UNESCO, the Ministry of Education in Lao PDR and the Ministry of Education in Mongolia. There are also those who support the need for international assessment data (i.e. technical advisors in international organizations) and those who have worked on LAMP at previous stages of the Programme's life to create the non-human actors in LAMP, these include ETS, staff employed to develop the testing instruments, translators, translation verifiers who check the translated tests, and so on. For practical reasons, but also given the specificity of the research question, I only interviewed LAMP staff at LAMP's headquarters and in Asia, and the ministerial staff in Lao PDR and Mongolia involved with LAMP or educational policy and statistics.

The non-human actors in LAMP are many and include a set of texts that play an important role in the alliance. For the purpose of this research project I have chosen to focus on four main non-human actors: the *Memo of Understanding* (MoU) between UIS and the country governments with two respective signatures which seal the alliance, *the standardized test instruments* which are translated into the chosen local language/s under strict guidelines which ensure the international comparability of the test results, the *LAMP International Planning Report*¹²³ which is a comprehensive description¹²⁴ of what the LAMP alliance implies, and the *National Planning Report* which is a template countries need to fill in (whilst making it 'theirs') on how LAMP will be carried out. The latter is also a legal document (together with the MoU) to which the country becomes accountable. These non-human actors, as we shall see in chapter five and six, play an important role in constructing LAMP's claims and tying the assemblage's adapted identities to its claims and objectives.

4.3.2 LAMP's moments of translation

The four moments of translation which 'translate' LAMP, both linguistically and geometrically, into an alliance, are explored in order to understand how LAMP's claims are constructed and

¹²³ When I was at UIS in 2012, I was told that this document had been under revision for some time (textual changes had been written in pen on the sides of the pages and were to be incorporated). However, the first version was still the one being used.

¹²⁴ Including LAMP's discourse, values and black boxed truths.

enacted. The concept of translation helps identify the LAMP negotiations, representations and the displacement of interests and objectives, as identified in the four moments here below.

The *problematization* process can be described as the stage in which UNESCO, in 2003, started formal discussions on the need for the Organization to develop international literacy assessments for low and middle-income countries based on a definition of literacy conceived as a continuum that required a new method of assessment. It was decided direct assessment and a methodology which would highlight the more complex picture at the lower level of the literacy continuum was needed. The UIS took on the role of 'defining the problem' and developing LAMP as a solution. The UIS therefore not only framed the problem (it must be noted that UNESCO is constituted by 196 Member States who decide the Organization's activities – thus its decisions require extensive discussions and support from all Member States) but also claimed itself as indispensable for all those with a literacy measurement problem in lower and middle income countries who need 'better' data to inform their policy. By defining the problem and the solution, the UIS is therefore in the position to negotiate and shape the identity and aims of the countries who join LAMP.

In order to position itself as the obligatory passage point, the UIS wrote to tens of countries asking if they would join LAMP (though some countries wrote asking to be part before being asked by UIS). The interested countries' identities are thus negotiated to include having a literacy problem as defined by the UNESCO literacy definition, and valuing internationally comparable literacy data based on literacy as a continuum. At this point, countries align to the objectives of LAMP in order to have better literacy data to inform policy, contribute to the development of a new literacy assessment methodology, enhance their understanding of literacy, and build national capacity.

Whilst the UIS is busy negotiating the identities of its allies, it also needs the UNESCO MS to join LAMP in order for the LAMP alliance to come to life. The countries which had expressed interest in the early years of LAMP were thus invited to workshops (i.e. a regional workshop in Bangkok for Asian countries) and LAMP staff visited the interested countries to carry out a preliminary workshop with the interested actors, in order to understand if there was commitment and an understanding of what LAMP involved and the truths to be black boxed. This is the moment of *interessement* – in which the obligatory passage point tests the actors which have shown interest and weakens the links between interested actors and other

competing social projects in the *web of multiple alliances* (i.e. PIAAC, PISA, TIMMS, PIRLS, EGRA and so on).

It is only at this stage of the process that countries and the UIS formally accept their assemblage-adapted identity and new objectives, formalizing the problematization and interessement processes with a formal binding document. Both sides (the Head of the UIS and the Minister of Education in the country) sign the Memorandum of Understanding and seal the alliance. The MoU establishes that for the alliance to be broken, an acceptable rationalisation for the decision has to be provided and that leaving the alliance can only be done at one pre-established moment of the cooperation. At this point of the translation process, all the actors involved in LAMP come to share aligned interests (although ANT does not suggest this means that each actor has changed his objectives entirely) and their new identities are performed and enacted through a set of LAMP practices.

At this point, the UIS establishes itself as the spokesperson who represents the alliance and talks in unison for all allies (this implies silencing the countries which have joined). The UIS sends out regular reports (posted on the website¹²⁵) and there are strict guidelines (manuals for standardization) that ensure all actors ‘speak the same language’, and trainings to ensure all actors understand what they have committed to and stand for.

4.3.3 LAMP’s black boxes

Black boxes are thus firmly closed and all the countries which have joined LAMP agree on a) the validity of measuring literacy as a continuum, b) the validity of internationally comparable literacy data, c) the processes to ensure UIS-stamped reliable literacy data, d) LAMP standardized instruments as being valid and representative of each country’s specific literacy skills, e) census-collected-data as being unreliable for policy purposes, and f) that LAMP provides better data which countries need to inform policy-making (these are seen in detail in chapters five and six).

4.3.4 LAMP’s centre of calculation

A rather appropriate name, centre for calculation, is the role that the UIS takes on after going through the translation processes, in order to ‘take’ literacy as a situated, plural, social practice

¹²⁵ <http://www.uis.unesco.org/Literacy/Pages/lamp-literacy-assessment.aspx> accessed in June 2013.

and transform it into a 'transportable representation' (Rottenburg 2009: 182) by standardizing what literacy means for all countries joining LAMP. Standardized procedures together with the standardized instruments turn the messiness of social practices ('elements that only exist in separate locations', *ibid*: 181) into a universal skill which is calculable and can be represented in internationally comparable numbers and made legitimate by the strength and the intensity of the LAMP alliance.

The obligatory passage point during the moments of translation and the centre of calculation lead us to ask about power in the LAMP alliance. It would almost appear that the alliance is 'in the hands' of one actor although ANT suggests we are looking at the world through an ontology of networks. In Latour's words, those who enroll (i.e. in this case the UIS) have *in actu* power. It is not seen as the UIS exerting power on the actors enrolling into the LAMP alliance, but as power through actors who decide to join the alliance for their own interests. So although the UIS becomes the obligatory passage point, it is not alone in exerting power. The UIS would not be able to carry out LAMP without the countries negotiating their newly adapted identities and goals. The success of the Programme is not in the intrinsic quality of LAMP – it depends on the durability and intensity of the alliance, which thus distributes the power to the whole alliance in a complex way. It becomes a sort of assembled power which exists through the relations established amongst the actors, although not all actors join with a 'mediation' role (carrying agency) but simply as intermediaries (although all actors have equally potential agency according to Latour).

4.4 ANT's conceptual limitations to enquiring into LAMP participation

In this section I discuss criticism of ANT and the limitations an ANT analytical framework may have on the analysis of my data and the findings I reach. I then suggest new concepts which emerge through the application of ANT to my research.

The main criticisms of ANT are that it is network reductionist, a highly descriptive method of enquiry, dogmatic (Latour 1996b), and that it attributes agency to non-human actor-networks. I look into the implications these criticisms may have on my application of ANT and the potential limitations for my findings.

Shilling has stated that ANT creates network reductionism, 'a tendency to reduce everything to networks' and that 'a network can result in a failure to distinguish between the different

ontological qualities of these phenomena' (2012: 98). Goodwin (2009) suggests that 'if you look for networks you will find them' and Jessop et al. (2008) suggest that network-centrism may lead to a 'flat ontology' (2012: 392) which 'entails a one-sided focus on horizontal, rhizomatic, topological, and transversal interconnections of networks, frictionless spaces of flows, and accelerating mobilities (Castells, 1996; Sheller and Urry, 2006)' (2012: 391) rather than the consideration of 'historically specific geographies of social relations' and 'contextual and historical variation' (2012: 392).

Although ANT appears to be a particularly helpful methodology of enquiry for understanding the processes of joining LAMP, its ontology of networks can be considered one of the limitations to my analysis. ANT's network ontology may be obscuring other potential understandings of LAMP participation and as a consequence may be hiding interesting insights that could have been gained through the application of other frameworks of analysis. However, the network ontology does provide tools that are equally valuable; for example, the tools to look at a globally complex processes like LAMP which is scattered whilst at the same time highly interconnected, and to understand the conflictual interests projected into LAMP and the important role of its non-human actors.

ANT is also criticized for being a highly descriptive methodology of enquiry which 'rarely deals with depth' (Shilling 2012: 98). However, Latour (1991) makes the case for ANT's descriptive approach being explanatory at the same time as descriptive.

The description of socio-technical networks is often opposed to the explanation, which is supposed to come afterwards. Critics of the sociology of science and technology often suggest that even the most meticulous description of a case-study would not suffice to give an explanation of its development. [...] Yet nothing proves this kind of distinction is necessary. If we display a socio-technical network – defining trajectories by *actants*' association and substitution, defining *actants* by all the trajectories in which they enter, by following translations and, finally, by varying the observer's point of view – we have no need to look for any additional causes. The explanation emerges once the description is saturated. [...] There is no need to go searching for mysterious and global causes outside networks. If something is missing it is because the description is not complete. Latour 1991: 129 - 130

Furthermore, in the application I make of ANT to LAMP, the absence of LAMP activities to observe (discussed in the previous chapter) makes my analysis less descriptive.

Among other main criticisms of ANT is the fact that agency is attributed equivalently to non-human and human actors, and the suggestion that non-human actors embody human intentions. It must be stated that ANT does not see non-human actors as having 'intentions of their own' but that their existence and role in assemblages through the relations they establish need to be taken into consideration when analysing all actors in an assemblage. Although this viewpoint may be questionable by many research traditions, the application of ANT to non-human actors does provide insights that may otherwise be difficult to highlight in my research. In the case of LAMP we shall see in chapter five and six that the standardized assessment instruments (which ANT might view as innovative technologies, as in STS) play a crucial role in the 'translated' identities; how the MoU and the *National Planning Report* have a binding effect on the alliance; and how the *LAMP International Planning Report* constructs LAMP's claims.

ANT is also criticized for implying that actors are not autonomous but 'nodes in wider social and material linkages' (Shilling 2012: 97). However, ANT actors do negotiate and decide to join and leave alliances, as best suits their interests (as seen in the translation moments).

Although there are limitations to ANT and the focus on LAMP as a heterogeneous network, the application of ANT to the process of joining LAMP seems to gain extensively from its analytical framework, especially through the concepts of piggy-backing, black boxes and moments of translation (discussed further in the data analysis chapters).

4.5 Conceptual contributions to ANT through its application to LAMP participation

Through the application of ANT to the LAMP assemblage, the lack of conceptual tools (which may represent limitations to ANT as a material semiotics) has emerged. This lack of conceptual tools might be where my research can contribute to ANT by putting forward four new concepts. The concepts I suggest are connected to the criticism of ANT's inability to help uncover 'why' questions.

ANT states that allies adopt a common language which allows their multiple alliance-adapted identities to communicate. Based on the concept of convergence (Callon 1991) which allows

contradictory identities to fit together in the same assemblage, but also based on the application of ANT to my data, I argue that allies communicate through a *language of convergence*. This *language of convergence* is key to understanding how allies can be part of the same alliances whilst furthering conflicting interests. Discussed in other terms, scholars have put forward similar concepts in the field of international educational policy. With the concept of hyperarratives, Stronach (2010) states that policy actors sing a global language of education which allows them to speak the same language without converging in practice, and Steiner-Khamsi and Stolpe (2006) argue that policy actors speak the language of their allies in a similar manner (as seen in chapter two).

ANT states that alliances compete for allies but also that their allies defend the alliance from competing ones. I call this a *competing web of alliances*. Through the application of ANT to my data, I argue that alliances do not only compete for allies from other assemblages, but can reinforce the need to be part of multiple alliances. I call both the competing and supporting alliances a *web of multiple alliances*. In the case of international assessments in Lao PDR and Mongolia there are multiple assemblages which co-exist, at times pulling actors from one assemblage to another and at times strengthening the need to participate in more than one international assessment assemblage, without having forcedly to disassemble from other assemblages. In chapter two I discussed the multiple assemblages as a universe of international assessments, which I see populated with *smaller alliances* (i.e. the LAMP assemblage).

The criticism of ANT not providing the conceptual tools to answer 'why' questions, is partly an overlooking of ANT's piggy-backing concept. I argue that this piggy-backing can be complemented by a concept I call *the greater alliance*. Based on my data analysis and the global ritual of belonging finding I reach (in chapter six), I argue that my research points toward there being an ultimate aim for assemblages, which in ANT terms could be described as '*the greater alliance*'. This concept would imply that by joining smaller assemblages like LAMP, actors aim at creating relationships with other assemblages which draw them closer to assemblages they have reason to value and who represent the ultimate aim of participating in the smaller assemblages (i.e. LAMP). The valued community, often constituted by successful economies and reference societies, can be represented as a *greater alliance* at the centre of the *web of multiple alliances* and be seen as a route to recognition and legitimization.

Lastly, it must be stated that the use of ANT may appear an obvious methodology of enquiry for a research question that focuses on understanding why countries join international assessment programmes (quite clearly an assemblage or a network) and also lead to a finding of 'global belonging'. However, ANT has facilitated an in depth and nuanced analysis by looking from the inside of the LAMP process to uncover what is happening around LAMP and other international assessment programmes. I argue that ANT has provided the tools to understand the process of LAMP participation and highlighted the 'global belonging' process through the conceptual tools it provides, which goes beyond the theory of assemblages.

Weighing out the limitations of ANT on my research, I believe ANT provides more than it manages to limit this research. Its application in chapters five and six extensively draw on the discussions and concepts presented in this chapter.

In this chapter (and the following) I discuss my data analysis in search of an understanding of what drives lower-middle income countries to join international assessments. I do this by further unpacking the main question into sub-questions which have emerged through my data analysis, informed by the methodological, conceptual and theoretical frameworks outlined in the previous three chapters.

This data analysis discussion has been divided into two chapters in order to explore, on the one side (chapter five) what LAMP claims to do in its public narrative and how these are (or, are *not*) enacted, and on the other side (chapter six) what other reasons drive countries to participate which LAMP does not claim. LAMP claims that,

- It has the methodology to produce sound data needed for policy;
- It has the methodology to value context diversity and produce 'better data';
- Its methodology allows countries to compare their skills with approximately 30 other countries (mostly high income countries).

Based on these claims, the questions explored in chapter five are:

- How does LAMP construct and the enact its policy identity? How is LAMP's policy claim received and enacted in Lao PDR and Mongolia?
- How does LAMP deal with the tension of valuing cultural diversity whilst at the same time standardizing? How is this tension received and enacted in Lao PDR and Mongolia?
- How does LAMP's 'better data' claim play a central role in assembling LAMP allies? How is LAMP's 'better data' claim received and enacted in Lao PDR and Mongolia?
- How does LAMP provide international comparisons with high income countries whilst respecting cultural diversity? How is LAMP's contradictory cross-country comparison claim received and enacted in Lao PDR and Mongolia?

Discussing these questions allows me to understand how LAMP makes claims to enroll allies and how these claims become part of the LAMP assemblage identities which Lao PDR and Mongolia adopt to be part of LAMP. ANT's concepts of piggy-backing interests, its translation stages, and the black boxes which are sealed in the mobilization phase, help explain the process (both the how and the why) through which actors are assembled in LAMP.

Following the order of the above listed question, I first discuss the LAMP documents I analysed (the non-human actors) and interview extracts (human actors) from the centre of calculation, before discussing how their counterparts in Lao PDR and Mongolia perceive these claims and enact (or do not enact) them.

5.1 LAMP's policy claim

In this first section I discuss how LAMP constructs its policy identity and how it is enacted by its human and non-human actors, firstly at the centre of calculation and then at the periphery. I argue that although LAMP's non-human actors construct a strong policy identity, its human actors perform it poorly. I then ask how this is perceived by the periphery actors and suggest their 'light engagement' with LAMP as a policy initiative may be traced back to the 'disbelieving' engagement enacted by the centre of calculation.

The public narrative of international assessments has created a widely upheld belief that international assessment numbers are scientific evidence for policy making and informative monitoring. This narrative attracts the attention of policy makers who rely on evidence-based policy making but also those burdened with government concerns about economic competitiveness and 'preparedness relative to other countries' (Murphy 2010: 33). Murphy argues that these values play a crucial role in the conceptual development of international assessments).

This narrative is steered by the organizations administering international assessments and testing agencies (the OECD, IEA, UIS and ETS) and maintained in their technical working documents, publications, and websites. With the publication of the first PIAAC results in the first of an annual publication called *OECD Skills Outlook*, the OECD reinforces this narrative.

The Survey of Adult Skills, implemented in 24 countries, and the Education and Skills Online Assessment for individuals are part of the package of tools available *to support countries develop, implement and evaluate policies* that foster both the development of skills and the optimal use of existing skills.¹²⁶

UNESCO advocates that the first step towards sound policies in education is the production of sound data. '*Sound policies and planning need sound data* – reliable and timely data on literacy

¹²⁶ <http://www.oecd.org/site/piaac/> accessed on 12/10/2013. My italics.

levels of population groups, *on patterns of literacy and illiteracy*, and on the types, quality and outcomes of literacy programmes.’¹²⁷ It is within this context that LAMP’s main publication states that ‘In its basic form LAMP is designed to provide data [...] *to inform public policy debate, be used to formulate policy and to monitor policy impact*’.¹²⁸

These extracts are based on the assumption that ‘sound data’ can be produced and that internationally comparable data can inform and produce effective policy. This underlying conviction has been black boxed to the extent that few policy-makers question the international data discourse, the methodology and the numbers produces. It is interesting at this stage to look at how LAMP constructs its policy identity, before understanding to what extent countries are interested in LAMP as a policy tool.

Black box 1

The unquestioned truth is that in order to formulate and monitor appropriate and effective policies, countries need timely, policy-driven internationally comparative data on literacy levels.

The centre of calculation makes this claim through its non-human actors, though its human actors engage lightly with this claim.

Lao PDR accepts the claim and states that it will use LAMP for policy, though its human actors articulate poorly how this will happen.

Mongolia accepts this claim and sees comparative knowledge as a way to go towards international levels of education. Human actors involved in the assemblage state they do not know how to enact LAMP’s policy claim.

5.1.1 LAMP’s policy identity constructed by its non-human actors

In this section I discuss how LAMP’s non-human actors play an important role in constructing LAMP’s as a ‘policy initiative’. Having discussed the stability and durability provided by non-

¹²⁷ UNESCO, Global Literacy Challenge, 2008: 44. My italics.

¹²⁸ UIS, LAMP International Planning Report: 7. This is a working document which stipulates what LAMP is, but also its objectives, implementation strategies, etc. My italics.

human actors in chapter four, I here focus on how LAMP's policy identity is firmly constructed in main working document, the *LAMP International Planning Report*.

The *LAMP International Planning Report* states that LAMP is a response to misleading census data on literacy, which it describes as inadequate to inform policy and results in 'inappropriate policy interventions' (2004: 1) that hinder the effectiveness of public policy. It then defines LAMP as a 'policy-oriented assessment system' (drawing on Overgaag and Goddeburre 1989¹²⁹) which intends to provide data which it qualifies as *international, better, valid, sound, more reliable, high-quality, complex-statistical, and policy-relevant*¹³⁰ on 'seven issues that are of central importance to policy development' in developing countries.

'1¹³¹ Understanding the learning needs of adults at various levels of literacy and numeracy skills and determining perceived barriers to improved literacy levels; 2 Literacy's relationship to social and cultural characteristics; 3 Impact of formal education on literacy levels; 4 The achievements of adult learning systems; 5 Literacy as a catalyst to achieving high rates of macro-economic growth; 6, Literacy's relationship to inequalities in economic outcomes at the individual level; 7 The relationship between self-declared literacy and individual literacy skills.' 2004: 12

The *LAMP International Planning Report* maintains that generating this causal-relationship knowledge is needed 'to inform public policy debate', 'to formulate policy and to monitor policy impact', 'establish priorities, allocate funds and decide on implementation methodologies', and thus has 'a profound impact on outcomes in the long run because of their influence on policy, funding or practice' (2004: 7).

From an ANT perspective, the policy identity which LAMP constructs through its non-human actors has an important role in the *problematization* stage (as seen in chapter four). UNESCO's uncontested authority and expertise in educational policy provides LAMP the authority to define countries' policy limitations (the problem) and thus establish itself as *the* solution. It

¹²⁹ The full reference is not given in the document, nor is any reference to this document available on the Internet in November 2013.

¹³⁰ These are all the adjectives used to describe LAMP's data.

¹³¹ In the original document these numbers are indicated as 4.3.1/2/3/4/5/6/7 but for readability I have adapted them simply to a list from 1 to 7, and added semicolons at the end of each phrase.

does this by providing data of uncontested quality on the literacy reality in LAMP countries and by defining the causal relationships between literacy and the seven issues of ‘fundamental importance’ (thus generating the truth not only in terms what and whose literacy counts but also why it counts) as the means to policies which will be effective, appropriate, and adequate¹³².

LAMP documents also state that the UIS will be involved in the dissemination activities of the LAMP data¹³³, and stipulates that the highest level policy actors in LAMP countries must be engaged to ensure LAMP data is used for policy.

‘The role of the Minister (or MSC) is to ensure that the Programme is developed, implemented and completed as planned and that the results are disseminated and used for policy purposes.’

MoU: 2

It is therefore inconsistent that the national planning template, the *National Planning Report*¹³⁴, which countries fill in assisted by UIS LAMP staff and are then bound to, has no clear focus on the national policy (i.e. the current relevant policies, or policy limitations) nor on intended policy activities (i.e. policy reform or amendment plans)¹³⁵.

In ANT terms, LAMP and its coordinating agency establish themselves (with the help of its non-human actors) as an obligatory passage point by defining the problem and the solution (policies are ineffective because data is unreliable, LAMP will provide timely sound data for sound policy formulation). Based on LAMP’s non-human actors, the assemblage negotiated identities would be expected to be built on LAMP’s policy identity. The fact that the planning document almost ignores this aspect may allow countries to give this aspect less attention,

¹³² These are the qualifying adjectives that the *LAMP International Planning Report* uses to describe policies that ‘work’.

¹³³ As described by UIS#2, *‘The pre-dissemination workshop is the validation process of the whole thing – policy will be affected by this information, not only the data, but the way you see and frame the Programme, this is a crucial moment.’* UIS#2

¹³⁴ In this document the UIS and the LAMP country agree on the country rationales (which coincide with LAMP’s aims) for joining LAMP and the implementation plan. Considering that LAMP defines itself as a policy initiative, this is the only document in which the national uses of LAMP for policy could be elaborated and planned.

¹³⁵ When I mentioned this to my UIS LAMP interviewees, they agreed on the mismatch and suggested that this would need to be changed.

further to the fact that, as we shall see in the next section, the human actors in the centre of calculation have difficulty enacting this policy identity, described as a ‘policy fairy tale’ by one of my UIS LAMP interviewees.

5.1.2 LAMP, a policy fairy tale

In this section I look at the perceptions of the human actors at centre of calculation, which together with the non-human actors in LAMP, one would assume to be enacting LAMP’s policy claim. I discuss how the actors at the centre of calculation appear to engage lightly with LAMP’s policy claim and I then question how this approach is received and enacted in Lao PDR and Mongolia.

When speaking to a wide public in 2011, two UIS LAMP actors put policy at the heart of LAMP’s *raison d’être*, stating that *‘the whole effort would not be justifiable if the results were not properly communicated in order to be used by those in charge of policy and programme design and implementation. This topic relates to both the technical soundness of the reported results and analyses as well as its intelligibility and capacity to address the relevant policy questions.’*¹³⁶

A year later, my UIS LAMP interviewees did not think the abovementioned activities (policy-directed communication of the results) would be carried out¹³⁷ nor did they believe the first four LAMP countries (with the exception of Paraguay) would fund the writing and publishing of country reports on the LAMP results (this is classified as a dissemination activity that would have become a policy tool providing analysis and recommendations).

‘We are not going to be able to do much in terms of policy, but the countries should, in Palestine we had money to do a workshop on policy uses, and that LAMP has been the central turf of the Palestinian bureau of statistics, and the MOE or maybe they do not have one, but the educational authorities are not on board or in the picture, when we wanted them to have this workshop with prospective users, and years went past, and we never used the money for it in the end, and now with the whole UNESCO and Palestine and the US issue, it is not going to happen.’ UIS#6

¹³⁶ This reference has been removed for confidentiality purposes.

¹³⁷ In part due to UNESCO’s sudden funding shortage (following the USA’s funding cut to UNESCO in 2012, as discussed in chapter two).

'I am trying to force, yes, that is the right word, the Palestinians to do some activities for dissemination, because they are thinking of producing a report with statistical tables and that is all, we don't want this, we want people working on adult education using this, so I am pushing them but that should not be necessary but it should be embedded in the original design of this.'

UIS#2

From the two extracts here above, what emerges is a rather different picture to extract from 2011. My interviewees argue that the cause of LAMP not-fulfilling its policy claims is to be found in the country's level of commitment to LAMP as a policy initiative but they also argue the responsibility is to be found in the non-human actors of the LAMP assemblage (i.e. the *National Planning Report* does not mention LAMP's policy role).

'They in practice refused to make it a real conversation with other agencies so I don't know if it is going to be useful for policy, and they did it very very quickly, first to do the field test and they had been the last to join, but it was part of all of this, it was timed to be part of this, but I don't think for instance that they did a lot of thinking on literacy and on how this data is going to help work on policy.' *UIS#6*

'To what extent LAMP is received and penetrates depends on the individuals on the other side, let's say we do the best possible dissemination like in Paraguay, we meet with people from literacy programmes and adult education, etc., if they don't care, they don't care, it's over, you make your effort, you reach where you can, but beyond that, if they don't care, they don't care, or maybe it is different, the Palestinians produce statistical reports and distribute it to libraries because that is what they do, and just by accident the guy who is responsible for adult education programmes at the Ministry of education runs in to it and finds it interesting and starts using it, and we cannot anticipate those things, it's a more sort of sociological discussion.' *UIS#2*

My interviewees insisted that for LAMP to change the way literacy is understood and thus change the way it is addressed in national policy, everything depends on the level of policy commitment in the LAMP countries. They concluded that whether LAMP will be used for policy is unpredictable and beyond LAMP's reach (although they earlier took on part of the responsibility in that the non-human actors in LAMP do not tie LAMP countries down sufficiently to enact LAMP as a policy initiative).

It is significant that my UIS LAMP interviewees are more willing to discuss the perceived superficial commitment to LAMP as a policy initiative (rather than their own perception), which contrasts with the public narrative which LAMP's non-human actors substantiate. This contrast between LAMP's human and non-human enactment of LAMP's policy claim, hides a tension which UIS LAMP staff appear to express but not deal with at a practical level (policy oriented dissemination activities) and theoretical level (i.e. questioning the assumption of sound data for sound policies). Rather than questioning whether a new, internationally comparable method of data acquisition is actually the solution needed in countries like Lao PDR (where the literacy challenge is not only a question of poor data), my interviewees question the reception of LAMP as a policy tool.

'In this situation where you have literacy data that will allow you to put in place policy interventions that will change everything, sounds like a fairy tale to them, and they just don't care, they would rather have data that they can put on their report and that's it.' UIS#6

Suggesting that LAMP as a policy initiative is perceived as a fairy tale is strong statement. I question whether my UIS LAMP interviewees do not attribute their own perceptions to their country counterparts. Whether this is a shared perception or not, the metaphor begs further unpacking in its application to LAMP.

Fairy tales are the myths people hold about what could happen in their lives though common sense tells us fairy tales are something that could never happen in real life. They are considered unrealistic and fictitious. But people still listen to fairy tales as they narrate hardship and misfortune but also success and happiness. The fairy tale metaphor implies that LAMP's policy claim is a story with an enemy (illiteracy) and a hero (literacy), starting with a struggle (a literacy problem) that has a happy ending (a policy that solves all literacy problems). LAMP as a fairy tale suggests LAMP has magical powers on policy that people like to believe, whilst knowing it is only a myth.

This disbelieving approach seemed to be shared by most of the interviewees at the centre of calculation, though one interviewee distances herself from the countries which *'do not care'*, stating that *'we do care'*.

'The more important part would be, what can the country do with this? The global report, absolutely nothing, they have to spend the time to understand how this helps them, but taking

it to impact local policies, it is not going to happen, I don't think it is going to happen. I will try when we are doing the analysis and talk to the four countries individually and highlight in boxes some of the analysis that could help them, they also do their own analysis and we are here to support them, but it would be nice to show case that to everyone else, to show we do care, you know it is not a standard procedure, we want to help you improve your policies or tweak your policies. The people who are going to be re-writing policies, tweaking them do not necessarily understand the technicalities.' UIS#7

The centre of calculation human actors' light engagement with LAMP as a policy initiative contrasts with the policy claim LAMP's non-human actors construct. Having recognized this conflictual policy claim, I ask how this conflictual policy claim is received and enacted in Lao PDR and Mongolia.

5.1.3 LAMP data for Lao policies – a local fairy tale?

In this section I discuss the way LAMP is received as a policy initiative in Lao PDR, although the information generated in this regard is based on the very few interviewees who mentioned LAMP for policy (and when they did, what they said was generated by me 'pulling out' information with specific questions, which made most remarks rather brief and poorly articulated).

Three high level policy actors in Lao PDR, who at the time of my interviews were directly involved with the NFE policy revision process, confirmed that LAMP would be used for policy, specifically to identify target learners, plan provision and formulate their policies according to UNESCO's literacy policy definition.

'They use data on literacy from the LNS 2001 and they have no other data so LAMP would be good to measure the target learners.' Lao#12

'LAMP will be key for planning.' Lao#13

'In policy we should refer to UNESCO standards and develop policy based on that, to take a world-informed approach, not one place, lessons learnt from all the world.' Lao#14

As we shall see in the following sections, my interviewees voiced other concerns which they related to LAMP. As stated above, it is likely that these policy related statements were in part

triggered by what they believed I wanted to hear (see my methodology section for more on this). The fact that this information was given to me when I asked ‘how will you use the LAMP results?’ means this information may be less meaningful than concerns like ‘*we need to be part*’, ‘*we do not stand alone*’, ‘*we need to see where we are in the world*’ (which my interviewees shared with me without me asking specific questions).

At present it appears that LAMP’s policy claim does not play an important role in the reception of LAMP in Lao PDR. It may be that LAMP serves more important functions (as we shall discuss later) other than being a policy tool.

5.1.4 LAMP data for Mongolian policies – a local fairy tale?

As in the section here above, I discuss how LAMP is received as a policy initiative in Mongolia. Although my Mongolian interviewees engaged with LAMP’s policy claim more than their Lao counterparts, they too did not engage with it spontaneously. When asked, a number of my interviewees suggested LAMP data would help policy making but also aid them identify policies of the top ranking countries for Mongolia ‘*to go to international standards*’. Others expressed unease in the use of LAMP and assessment data for policy.

Interviewees to whom I asked specific policy questions related to LAMP, stated that they cannot work with the Mongolian census data on literacy and that LAMP would be the tool they needed to identify problems and re-do their policy.

‘Statistics are important for policy as they help formulate and decide policies.’ Mon#20

‘We did LAMP because we cannot work with the census data – are you literate or not?’ Mon#22

‘With the results we will go to the policy, invite UNESCO if necessary, and re-do the policy if necessary, we will discuss based on the LAMP results.’ Mon#28

‘LAMP results will be used for education policy, teachers’ education, national curriculum for secondary education and text books.’ Mon#25

Not only do my Mongolian interviewees suggest that they might use LAMP data to ‘re-do’ the literacy and non-formal education policy but articulate which aspects of the education policy they are interested in reforming. It is interesting to note that the focus is on learning content and teachers, indicating a pre-informed idea of what needs to be ‘re-done’.

It might be suggested that reforming the curriculum and the text books (as suggested by Mon#25) based on LAMP's 'dominant literacy' (see Hamilton 2001 in chapter two, on dominant versus vernacular literacies being created through international assessments) not only privileges globally valued literacy practices in international assessments, but also supports the world culture theory of educational convergence (see Meyer and Ramirez 2000 in chapter two). Further supporting the educational convergence theory, but also the policy and borrowing theory, my Mongolian interviewees suggested their interest in better data implied an interest in international educational rankings.

'We look at the main reasons why a country scores so high.' Mon#27

'We need to go to international standards but we do not forget our traditions and culture – based on this we review our standards. For this type of review we need proper data. Statistics are important for policy as they help formulate and decide policies.' And then referring to policy borrowing from Finland, he stated *'I want to see what policies there are behind the numbers'*. Mon#20

Although the two interview extracts here above refer to using data for policy reforming based on international assessments, the focus is not on what the data 'says nationally' but internationally. Focusing on international rankings *'why a country scores so high.'* Mon#27¹³⁸ and *'We need to go to international standards'*, implies that the 'informing policy' is about 'informing comparatively', or governance by comparison (as discussed by Martens 2007 in chapter two).

The above mentioned Mongolian government officials (Mon#20 and Mon#27, who were both involved in the re-writing of the new education policy reform during my fieldwork period) seemed keen to learn from countries who had found the 'winning' policy formula as identified by international numbers. What Mon#20 states above could also be rephrased as 'What international numbers do these policies produce?'. The focus is therefore on better data for policy, but when unpacked it appears that policy makers seek this data to identify globally valued policies. Although one could argue that this perspective is also a way to inform policy

¹³⁸ Mon#27 was also in the process of preparing an analysis of the Finnish educational system *'because it always has the highest results'* Mon#27 as the Mongolian Minister of Education was planning 'an educational pilgrimage' (Sahlberg 2011) to Finland.

with international assessment data, it shifts the attention away from what UIS#7 suggests, in which each country is different and requires a different analysis, to focus on other countries' performance and policies. The local specificity loses importance whilst the global, international aspect is valued.

The policy approach expressed here above resonates with policy borrowing and lending theory and the shift towards 'research and evidence-based' policy conceived as 'integrity in policy making' (Gorur 2011: 90). Evidence based policies based on an adherence to scientific evidence which will not only provide countries with appropriate and effective policies but also avoid the cost of policy mistakes, as suggested by the Mongolian Minister of Education during my fieldwork research in Mongolia.

'We need research for research-based policies so as to have fewer chances of making mistakes.'
Mon#18B

Based on this discussion, I argue that although there is an interest in LAMP as a policy tool in Mongolia, it is differently conceptualized if compared to the case UIS LAMP makes for better data (sound data on the levels of competences to highlight the problem of literacy at the lower levels and inform policy). In fact, a number of Mongolian policy actors I was interviewing during my fieldwork, who were in the process of re-writing their policies¹³⁹, suggested they did not know how to use LAMP data to inform policy.

'Assessment is very important for reform, we do evaluation and monitoring mainly for policy' but then stated that *'I do not know how to use assessment data for policy. We use national assessments to evaluate teachers and to pay teachers extra, assessments are just to analyse, see this way is not good, we need to change, but we do not use assessments for policy change.'*
Mon#27

Mon#17 suggests a similar perspective, *'I'm not sure, I am not sure how to use it for policy'* before stating that *'there are new people and they want to change and so they need data'*. She also stated that *'when they did an assessment of education in 2nd and 4th grade – the results were not bad, but they did not influence the policy makers, they just want policy recommendations, they don't like numbers.'* Mon#17. Although partly contradictory, what

¹³⁹ Whilst I was in Mongolia in October and November 2012, the new Government had just settled in and Mon#22 informed me that *'This government calls itself 'cabinet of reform' and so every minister must do reform'*.

Mon#17 appears to be stating is that international data to 'inform policy' is not a self-evident process, and that policy makers prefer recommendations and leave international numbers to justify policy change.

It might be argued therefore that countries use international data in different ways as a strategic resource to support policy, rather than simply have a logical sequential informing relationship.

5.1.5 Conclusions to LAMP's policy claim

The data discussed in this section reveals that although LAMP is constructed as a policy initiative through its main non-human actors (MoU and *LAMP International Planning Report*), the non-human actor which translates LAMP into practice in each local setting (the *National Planning Report*) appears to neglect LAMP's policy claim altogether. The human actors enacting LAMP's policy claim at the centre of calculation also show a light level of engagement, and go as far as stating LAMP's policy claim is perceived as a fairy tale by countries with a literacy problem.

In both Lao PDR and Mongolia, the human actors involved in LAMP and policy expressed tensions regarding LAMP's policy claim. The Lao policy actor interviewees engage lightly with LAMP as a policy initiative, suggesting it is not among their primary reasons to participate though they pay lip service to LAMP's policy narrative. Although my Mongolian interviewees appeared to be slightly more engaged with LAMP as a policy tool, their interest in international assessments differs from the UIS 'policy informing' narrative. It appears that LAMP is used in different ways as a strategic resource to support policy by informing the process of looking for best practices through policy borrowing from top performing countries, and as a tool to identify internationally valued literacy practices for policy. The way my Mongolian interviewees related LAMP to policy relates to the theories of governance by rating and ranking (Lehmkuhl 2005) and by comparison (Grek 2009) by creating interest in behaviour that is '*accepted as best performing or best in line with the specific criteria of the respective rating or ranking framework*' (Lehmkuhl 2005: 3).

5.2 Cultural diversity or standardization? Black boxed tensions

In this section I look into the claim that differentiates LAMP from other international assessments: measuring literacy in an internationally standardized way whilst also measuring in a context relevant way. I discuss how LAMP conceptually and methodologically deals with valuing cultural diversity whilst at the same time standardizing; and then, how this tension is received and enacted in Lao PDR and Mongolia. As a key to understanding LAMP's emphasis on respecting cultural diversity, I start by discussing how LAMP is embedded in UNESCO's peace mission.

As the *LAMP International Planning Report* explains, LAMP was a response to the development of international assessments (specifically ALL and IALS) as valuable policy-making tools, which were initially carried out in the OECD member countries. In the name of policy-making equality, UNESCO decided to provide its Member States with equal policy means (as seen in the previous section), whilst taking into consideration the state of literacy in lower and middle income countries with a higher number of individuals scoring at the lower levels, and the challenge of assessing across a greater diversity of cultures and linguistic families. LAMP's non-human actors state that by improving literacy (through policy and planning), LAMP is also contributing to UNESCO's commitment to quality education for all (mainly through policy) which ultimately promotes peace in the mind of all people¹⁴⁰ (specifically by contributing to social cohesion and the preservation and respect of minorities).

'The matter is made all the more pressing due to the profound impact that literacy and numeracy have been shown to have on social cohesion and the preservation of cultural and ethnic minorities, rates of overall economic development, population health and the efficiency of education systems.' *LAMP International Planning Report: 1*

LAMP's commitment to cultural diversity, which is built on the local adaptability of the test instruments, is at odds with the methodological and conceptual dimensions of cross-country comparability. Cross-context, cross-language and cross-culture comparability is at present methodologically achieved through the standardization of testing instruments and data generation methods. As we have seen in chapter two, standardization implies neutralizing the diversity of culture, context (Meyer and Benavot 2013), language, and literacy, since

¹⁴⁰ UNESCO's overarching mandate, as seen in the section dedicated to UNESCO and UIS in chapter two.

international assessment methodology frames them as a problem (Hamilton 2012). Furthermore, the methodology used for cross-country comparability is developed in order to allow the ranking of countries.

Although LAMP states it is open to context adaptation, its instruments and processes tackle this with difficulty, and leaves the Organization at odds with ranking as UNESCO's principles of cultural diversity imply the Organization does not rank countries (Cussò and D'Amico 2005).

The intellectual origins of UNESCO, influenced by the structuralist approach (Levi-Strauss, 1952), go some way to explaining why the Organization never published classifications, or indices, explicitly comparing the performances of countries, especially in the area of students' learning achievement. Cussò 2006: 534

In 2006, Cussò also questions UNESCO's approach to programmes like PISA.

It is relevant here to wonder whether an international organization such as UNESCO should fully embrace recent globalization goals, insofar as free-trade priorities (e.g. reforming and assessing education in terms of human capital) are not yet universally accepted. Moreover, the measurement of students' learning achievement, such as in the OECD's Programme for International Student Assessment (PISA), is an exercise which is not free of ambiguity. How learning achievement should be evaluated and compared, with which objectives, and to what extent, remains complex as is reflected in the debate on learning achievement test-problems (Goldstein and Thomas, 1996; Burgues, 1999; Green, 1999; Kohn, 2000). Cussò 2006: 542

Cross-country standardization, comparisons and rankings (all methodologically part of LAMP) are a thus point of tension in UNESCO's commitment to context adaptability and cultural diversity respect in LAMP.

5.2.1 Tracing LAMP's 'good intentions'

The extract here below outlines UNESCO's intention to develop a culturally sensitive international assessment, built upon the methodology of former international assessments which were not developed to cope with the cultural and linguistic diversity LAMP engages with, and which have been criticized for being Western.

'Recent advances in social survey and educational assessment methods have provided economically advanced countries with some tools to fill their needs for literacy information. Many now have valid, reliable, comparable and interpretable data on the literacy and numeracy skill levels of their adult and youth populations and the ability to benchmark their situation with other countries at similar levels of development.'

The UNESCO Institute for Statistics (UIS), aware that a methodology and survey instruments were necessary to provide developing countries with a similar capability to produce and use such policy-relevant data on literacy and numeracy, decided to investigate the feasibility of developing them. A meeting of literacy programme managers and assessment experts was organized in January 2003 by the UIS with financial support from the World Bank to discuss the feasibility of such a development. It was understood that the methodology would have to be readily adaptable to various linguistic and cultural contexts, be able to assess the literacy of individuals over a range of competency, be reasonably inexpensive to administer and be responsive to national needs for literacy data as well as providing cross-nationally comparative indicators. There was agreement at this meeting that the development of such a methodology was needed and that it was feasible. The project was subsequently titled the "Literacy Assessment and Monitoring Programme (LAMP)" and was launched in conjunction with the launching of the UN decade for literacy, March 2003. It was agreed that the programme could and should use the International Adult Literacy Survey (IALS) as a methodological basis for assessing higher-level literacy skills, but that substantial developmental work would be required to ensure greater differentiation of the lower levels of literacy.' LAMP International Planning Report: 2

The *LAMP International Planning Report* states that cross-country comparative indicators will be based on IALS methodology and test items (for the higher levels) whilst test items needed to be developed at the lower levels. It does not deal with how a methodology which is based on standardization will be made readily adaptable for various linguistic and cultural contexts, nor how the test items for the higher levels will be locally relevant.

The above extract expresses a strong desire to make something happen in terms of context relevant literacy data for policy, but also the uncertainty of how to technically make it happen. This desire to have the statistics versus the challenge of producing them (i.e. cross-cultural comparison without standardization) represents a strong correlation with Latour's Aramis

(1996) which had the support of allies who wanted to make Aramis happen, without ever having conceptualized how to create public transport that is private.

At a LAMP item development meeting held in Morocco in 2005, it was documented that among pilot countries there was concern about there being a more significant number of IALS test items than LAMP and national items. This shows how initial pilot countries (among these only Mongolia remained) gave value to the ‘true purpose’ of LAMP being context-sensitive, and may have played a significant role in the disassembling of multiple pilot countries (i.e. Morocco and Kenya left LAMP and Kenya carried out its own LAMP-inspired national assessment).

My interviewees at the centre of calculation were aware of this tension, though they stated that there was not sufficient will to overcome conceptual challenges facing international assessments¹⁴¹ (as seen in chapter two) and that LAMP alone could not overturn international assessment processes and frameworks, as initially anticipated.

¹⁴¹ *The definition was produced by the expert group in 2003 but the way that we define what we measure are IALS assessment frameworks, so they are independent from that definition, that are not very far away from that definition that define your constructs out of which you define... and then you define the items, is a different thing, that's the problem, you have to look at the assessment frameworks, you know Ralph Sin Clair from Glasgow university, now in McGill, and he wrote a paper and finally I understood the whole story because of him, if you look at the history of this, it's US 1983, we need to test the skills of the adult population, so ETS you know how to do this because you are running the national assessment programme, so ETS ran as a pilot survey, with 3000 students who were all 17, they look at the data, discuss the data, look at the items they use and on the basis of that, they produce all the conceptual framework that is behind this, ALL, IALS, PIAAC, they produced this with the sampling of 2500 young individuals in the US in the 80s, 30 years ago, only one country, only one language, only one age group, why is that thing going to work as a universal? How does that take into account the last 25 years of research in new literacy studies? They don't care and they have been recycling this thing for thirty years and making a living out of this, I am scared and I have not been able to replace the assessment items, frameworks, but I think it is the first thing we should do, we should have a framework that matches the definition from 2003, not that matches the behavior of the teenagers in the US in the early 80s – it is not serious, it is a major problem, we do not speak about it because nobody wants to hear that. But I am aware of those problems and I want to face them. They have adjusted a little bit, but they are the same frameworks, but it is basically the same thing, each cell corresponds to a level of difficulty.’ UIS#2*

Black box 2

The unquestioned truth is that LAMP respects cultural diversity through the local adaptation of its instruments whilst also maintaining a high level of instrument standardization to ensure cross country comparisons (including comparing with IALS and ALL countries). LAMP's human actors are now moving away from comparisons.

LAMP has difficulties establishing a balance between standardization and local adaptability and has resorted to becoming a highly standardized programme whilst at the same time moving away from country comparisons.

Lao PDR keenly accepts LAMP's ability to value local knowledge and skills whilst at the same time allowing Lao PDR to compare through standardization.

Mongolia was initially keen on LAMP's local adaptability but now sees LAMP as measuring global literacy. It thus accepts LAMP's move towards standardization because of its need to compare with other countries.

Neither Lao PDR nor Mongolia give LAMP's new non-comparability claim any consideration.

5.2.2 LAMP's human actors: the difficulty of black boxing contradictions

In this section I look into how the human actors at the centre of calculation deal with LAMP's diversity and standardization claim. Although the non-human actors appear to have resorted to standardization to cope with this tension, the same cannot be said for the UIS LAMP staff I interviewed who were uneasy with LAMP's standardization solution.

Initially, UIS LAMP went in a 'standardization' direction both in its narratives and development activities (i.e. contracts with ETS which did not welcome adaptation), but in 2007 LAMP tried to change its direction by becoming more 'culturally and linguistically sensitive'. LAMP's non-human actors (standardized tests, the *LAMP International Planning Report*, etc.) had already been developed and the actor-network identities negotiated, making their renegotiation difficult. The 2007 change in the way LAMP was administered created further tensions. The renegotiation of identities did not suit all LAMP allies, leading some countries to drop out and others join.

The UIS LAMP interviewees I talked to came across as torn between LAMP's principles and its non-human actors and methods. UIS#6 argues that although LAMP methodology produces

comparable data across countries, the agency which develops the test instruments (ETS), fails to recognize that comparability needs to *'take into account the specificity of each context'*.

'Of course Vietnamese is different to other languages and we start by acknowledging that, that if we want to make it comparable at any level, we are not going to put it on the same level, still we want to measure the same skill. Some organizations like ETS for example, have a very American focus, I think they fail to grasp that if you want an instrument to be comparable, it has to be paradoxically different so it can really take into account the specificity of each context.' UIS#6

My UIS LAMP interviewees¹⁴² described LAMP as a white Caucasian from North America, implying it had not grown into its true purpose of local adaptability. It is significant that as late as 2012, UIS#16 states that LAMP is still working in the 'diversity direction' without actually knowing how realistically this tension can be solved.

'I find it very different to other international assessments, ever since my colleague¹⁴³ came on board he has tried to make it more culturally sensitive, less rigid, in tune with its true purpose, in some way less colonial or less circumscribed to an ethnocentric, euro centric point of view, and I don't know what is going to happen, how feasible it is.' UIS#6

From an ANT perspective, LAMP stabilizes identities at the periphery from the centre through a common form of calculation (LAMP's procedures) and the stabilization of elements (LAMP's comparable international testing instruments). What appears to have happened in LAMP, is that the human actors are sticking to LAMP's true purpose narratives which are not in line with its testing instruments and processes. These tensions had been black boxed by the former human and non-human actors in LAMP's first stages. Re-negotiating the position of the centre of calculation, its forms of calculation and accepted truths, would imply re-negotiating the identities of the allies which would unsettle the already weak assemblage. And so, although uncomfortably, LAMP's human actors have come to accept LAMP's black boxed tensions in order for LAMP's assemblage to carry on existing.

¹⁴² Apart from one interviewee who gave LAMP a more mixed background identity.

¹⁴³ The name of the colleague has been omitted for confidentiality.

5.2.3 The local adaptability claim in Lao PDR and Mongolia

In this section I discuss how LAMP's local diversity claim is received, negotiated, black boxed and enacted in Lao PDR and Mongolia¹⁴⁴. Although both countries appear to value LAMP's diversity claim, they also give greater value to its need to standardize. In this section, I question whether there may be added value for countries joining an international assessment which is piloting how to include greater cultural and linguistic sensitivity.

Initially, LAMP's local adaptability claim was met with enthusiasm. Countries were keen to fully adapt the testing instruments and to develop local test items. One UIS LAMP interviewee recounts being recurrently met with the question *'Can we adapt it to what we want?'* UIS#2. But LAMP's adaptability is a delicate matter and its threshold of adaptability cannot be compromised if cross-country comparability is to be maintained. UIS#2 states that he has had to limit LAMP's adaptability *'because then LAMP would be a different thing'* UIS#2.

The local diversity claim was part of the early negotiated identity of LAMP's allies when the centre of calculation needed countries to provide adapted and local test items, whilst it maintained the right to state which test items failed LAMP criteria. During this stage, LAMP countries (Lao PDR was not part at this stage) contributed many locally developed test items and were fully engaged in the translating and adapting processes. ETS, as the authoritative black boxing ally, then revised both the translated test items and the locally developed ones and approved only a few. In a few cases, countries expressed dissatisfaction and as a result became more passively engaged in the LAMP processes. In other cases they were proud of their local test items traveling globally.

'Initially the first six pilot countries, they felt a bit imposed, but they did negotiate, the country had a lot of discussion, they engage, they wanted to change the items and we said no, they had a side meeting without us and in the end they said they would give it a go, and follow what UIS told them. Mongolia, when you are in a project for so long, maybe you become more like 'whatever you say', on a few occasions they raised concerns, comments, but we have not been very responsive to their concerns, so eventually they say 'whatever'. For example they have raised issues about translation, and because it is an international assessment, not all countries

¹⁴⁴ In this section I discuss Lao PDR and Mongolia together, rather than separating them into separate sections, due to the limited interview extracts on this LAMP claim.

use one language, to make sure the instruments are as close as possible to the source, once a country translated into their language we ask an international verifier to make sure the translation is close to what the original source is, they have been complaining with the verifier is not familiar enough with the country context, sometimes it is not acceptable for the Mongolian team and they want to have a conversation with the verifiers, and we said no, because the international verifier said no, and the Mongolian verifier is in and out of the country, since then, since the field test they basically say 'whatever' and they approved whatever the verifier wanted to change.' UIS#1

Whilst there were tensions growing in Mongolia regarding the local relevance and adaptability of the test items, some countries chose to accept a greater level of standardization (Mongolia) whilst others decided to disengage from the alliance and develop national assessments (Kenya and Morocco).

At the time of my fieldwork, Lao PDR had not yet dealt with the processes of local adaptation but expressed enthusiasm for LAMP's diversity claim.

'The definition of literacy is different in every context, because literacy needs are different from place to place. In a rural area the literacy needs are different to need in i.e. an urban area. If you are illiterate in a developed country you cannot survive in society, if you are illiterate in a rural remote village you can survive because you need something different, you need local knowledge of the plants, where and how to get food, etc. which allow you to survive. You need knowledge, not qualifications. The reason to do LAMP is because there is finally a tests that measures knowledge and not skills. It allows to compare literacy skills and the skills of using knowledge.' Lao#14

Lao#14's interpretation of how LAMP claims local adaptability does not necessarily coincide with LAMP's local adaptability claim. It may be that LAMP assesses the skills of using knowledge, it also requires the skills to access knowledge (i.e. reading a short text on Mongolian camels), and the skills to respond to the test item questions about the newly-acquired text-based knowledge. What appears to count in the Lao case is the personal interpretation of crucial policy actors in each country, who apply their conceptualization to LAMP's local diversity claim, further re-enforcing Flyvbjerg (1998) proposition of rationality (as a

discourse of power) being context dependent, making the local definition of the literacy reality projected into LAMP count.

As we have seen in the extracts above, Mongolia went through extensive negotiations and processes of test item development and translation. By 2012, when I carried out my interviews, my Mongolian interviewees' opinions seemed to have changed to focus on LAMP's global side. They stated that LAMP had not adapted locally because its aim is to measure 'global literacy'.

'LAMP is the same as other international assessments, just translate and implement. There are very few Mongolian test items. International test items are not confusing for Mongolians, we all have to live in the same world. Maybe the only difficulty is foreign names.' Mon#17

'I think LAMP is the globalization of literacy.' Mon#17B

From these extracts it emerges that LAMP's local dimension is almost entirely dismissed in deference to its 'global side'. Not only do my interviewees suggest that LAMP should measure universal literacy skills because Mongolia is not an isolated country, but also that the literacy measured in LAMP is equivalent to 'global literacy skills' or what is globally valued as literacy. The value placed on the 'global side' of LAMP magnifies the conflictual identity of LAMP.

It appears that each country perceives LAMP's local adaptability claim differently as best suits their interests and agenda. Although Mongolia initially tried to negotiate LAMP's local adaptability, they appear to have black boxed a 'global' version of LAMP's test items which they have reason to value. Lao PDR appears to have black boxed an interpretation which suits its interests but has not yet had the opportunity to enact it.

Why does Mongolia (and Lao PDR, as we shall see later) value LAMP's global side when LAMP was conceptualized as a programme valuing the local? This may be a challenging question to answer, but the insistence on the 'comparing to others', 'measuring the gap', and 'international standards' (as we shall see later in this chapter) leads me to interpret LAMP as a means to 'enter a global space'.

As suggested in the opening of this section, one might question why countries choose an international assessment programme which has made a 'true purpose' claim which both the centre of calculation and Mongolia have then black boxed in a contradictory manner. I suggest

that LAMP's test items based on a contradictory black boxes may represent a strategy of 'data defense' were the countries to decide to open LAMP's black boxes to dismiss the results. This would be a much more complex and difficult process had they engaged with other international assessments which are not in a pilot phase of experimentation.

5.2.4 Conclusions to LAMP's local adaptability claim

In this section I have discussed how LAMP's objective of integrating cultural diversity into its instruments and methods is at odds with the standardizing methodology of international assessments, and tried to uncover how this tension is dealt with by its non-human actors and human actors. Although cross-country standardization, comparisons and rankings are a point of tension in LAMP's commitment to context adaptability and cultural diversity respect, it appears that in the name of the LAMP assemblage, this tension has been black boxed and firmly sealed.

I then discussed how this tension is received and enacted in Lao PDR and Mongolia. Lao PDR, being at the early stages of LAMP and not having been involved in the processes of adaptation, stated that LAMP's ability to value local knowledge gave them reason to value LAMP. Mongolia on the other hand, having being through lengthy negotiations, appeared first to value local adaptation before dismissing LAMP's local dimension entirely, stating that LAMP measures global literacy because *'we all have to live in the same world'*.

I conclude this section suggesting that countries may choose to value LAMP's 'experimental' approach to local adaptability and its conflictual adaptability/standardization black box even though they see it as a global literacy measurement, because it makes the data more easily questionable were the countries to decide to dismiss data considered 'bad'.

5.3 LAMP's 'better data' claim: a convergence of interests

In this section I look into LAMP's 'better data' claim to understand how this claim acts as an assemblage glue by converging the interests of all actors involved in LAMP. I then look into the different meanings that are attributed to 'better data' and then black boxed by the centre of calculation, Lao PDR and Mongolia. In order to uncover the multiple meanings of better data, I look at UNESCO's in-house literacy dichotomy/continuum tension, how data validity is assembled in LAMP, and the 'better data' agendas of Lao PDR and Mongolia.

LAMP claims that in order for countries to better formulate their policies in response to their literacy challenges, countries need the better data which LAMP can provide.

'In recognition of the needs for better literacy data worldwide, the UNESCO Institute for Statistics has developed the Literacy Assessment and Monitoring Programme (LAMP).' MOU: 1

The centre of calculation takes for granted that the concept of 'better data' has a universally shared ontology and epistemology that views 'better data' as data based on three dimensions: methodological advancements in assessment, a conceptually advanced view of literacy as a continuum, and LAMP's purpose of being sensitive to different contexts. Based on these dimensions, LAMP's non-human and human actors construct 'better data' as data of greater quality¹⁴⁵.

As we have seen in the previous section, the issue of 'local adaptability' has already proved a challenge, and its assessment theory is weakened by Item Response Theory¹⁴⁶ requiring a balanced distribution of competencies (although LAMP is developed to highlight the picture of higher percentages of people scoring at lower levels). The second dimension which LAMP uses to construct its 'better data' is the shift from dichotomous literacy data to literacy conceived and directly measured (tested) as a continuum. As we shall see, this aspect of LAMP is a difficult black box to seal, which allows LAMP's 'better data' claim to conceal different interpretations and interests.

In 2003, for the purpose of assessment within the development of LAMP, UNESCO conceptualized literacy as a continuum of competencies, in principle doing away with literacy as a dichotomy.

Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning enabling an individual to achieve his or her goals,

¹⁴⁵ Although it contributes to the potential understanding of data actually providing a better picture than data of better quality, by illustrating the difference of tested literacy data versus dichotomous literacy data in the LAMP brochure available at <http://www.uis.unesco.org/Library/Documents/literacy-assessment-monitoring-programme-2005-en.pdf>

¹⁴⁶ The statistical theory upon which international assessments are based.

develop his or her knowledge and potentials, and to participate fully in the community and wider society.

This definition provides the structure for LAMP development. LAMP will concentrate on measuring individual ability to use printed and written materials. It will use the assessment results to determine where an individual falls on a continuum of literacy ability that ranges from very low levels of literacy to the very high. LAMP International Planning Report: 16

As discussed in chapter two, this definition tries to take into account recent scholarly debates on literacy, especially in the field of New Literacy Studies, though Street (2013) and Maddox and Esposito (2011) argue that being a single measure, the continuum fails to capture literacy's plural multidimensional nature. It is also argued that the definition of literacy which international assessments build upon only pays lip service to the conceptual understandings of NLS as opposed to the universal-literacy-skill understanding enacted and strengthened in international literacy assessment instruments. By stating that level three (out of five levels) is the level which allows people to function in knowledge societies, measuring literacy levels recreates a dichotomous understanding of literacy with those unable to cope and those able to cope with the 21st century literacy demands.

LAMP, like all other international assessments has been developed to measure a single battery of test items which are only one set of selected literacy practices applied to all contexts and languages and within the methodological constraints of such large scale projects. Thus, as in other international assessments (especially in IALS), LAMP measures *a* literacy, and does not necessarily measure the multitude of literacy practices which each individual encounters. This is supported by Hamilton and Barton's (2000) argument¹⁴⁷ that states IALS measures *one* literacy, not literacy *tout court* as stated in the IALS reports.

¹⁴⁷ As seen in chapter two.

Black box 3

The unquestioned truth is that LAMP provides better data. This claim is built upon methodological advancements in assessment, literacy conceptualized as a continuum, and LAMP's intention to be sensitive to different contexts. The methodological and conceptual constraints of these dimensions are not raised.

The centre of calculation together with Lao PDR and Mongolia conceal these constraints by assembling validity (and thus better data) through a network of committed allies furthering their own interests under different interpretations of better data. This black box thus represents a point of convergence for all the allies' conflictual interests.

5.3.1 Multiple 'better data' interpretations

In this section I look into the different interpretations of the better data claim, which my UIS LAMP interviewees recounted being constantly faced with, but also how my Lao and Mongolian interviewees understand the better data claim to meet their national agendas. I suggest LAMP's use of vague concepts (i.e. better data) is strategic, as ANT argues assemblages speak a vague language which allows numerous allies to come together even when their interests diverge. I thus argue that LAMP's network-constructed validity and its methodological advancements (summarized as 'better') have provided LAMP countries with a degree of statistical leeway in representing their literacy reality and supporting their national literacy narratives. This source of leeway, from an ANT perspective, represents a point of convergence of interests for all the actors (Callon 1991) involved in the LAMP assemblage as a way to 'fit together despite their heterogeneity' (1991: 148).

The 'better data' interpretations can be broken down into three interlinked understandings: (i) an enhanced understanding of literacy, (ii) literacy rates versus literacy levels, and (iii) data that sheds a better light on the literacy challenge.

- One of the four main aims of LAMP is to ensure that UNESCO's 'enhanced understanding of literacy' (LAMP International Planning Report: 4) as a continuum reaches all Member

States' measuring and policy activities¹⁴⁸. UNESCO conceptualizes 'better literacy data' as being measured along a continuum of competencies and through direct testing (rather than self-assessment).

- Although LAMP implies valuing and adopting literacy as a continuum, Member States and UNESCO still use literacy rates based on a dichotomy. LAMP countries are keen to extract literacy rates from LAMP data. Conceptually literacy rates cannot be constructed from literacy as a continuum, but some try to construct them in the different ways. For example, if level three, four and five are the levels needed to 'function fully' in today's knowledge societies, then those who score at level one and two; or even just those scoring at level one could be considered 'the new illiterates' and the rest as literates.
- Lastly, as we shall see in more detail, measuring literacy in levels of proficiency can be strategically used to paint a brighter literacy picture. LAMP's continuum starts from level one which is considered poor literacy skills (as total illiteracy is not conceived). Based on this conceptualization, a country would be able to declare its entire population literate even if all testees were to score at level one. It is therefore not surprising that many countries hope to portray a better picture of their country's literacy challenge, wiping out the statistical existence of illiteracy.

5.3.1.1 Better data, from my UIS LAMP interviewees' perspective

In this sub-section I discuss how my UIS LAMP interviewees conceptualize LAMP's better data, the tension between continuum and dichotomous conceptualizations, and how the better data claim is received and enacted in LAMP countries.

The first workshops, carried out in each LAMP country by UIS LAMP staff, are aimed at explaining how LAMP will provide literacy data of better quality. In ANT terms, this occurs during the *problematization* phase, when UIS LAMP staff try to engage new allies in their network by establishing *the* problem and offering *the* solution. During this phase the centre of calculation establishes that literacy as a dichotomy is non-informative for policy purposes and that LAMP's literacy continuum will allow countries to formulate and monitor policy effectively. During the first workshop, the assemblage allies negotiate their new identities.

¹⁴⁸ Most UNESCO Member States still address literacy in their measurement activities, provision planning and policy as a dichotomous concept.

'The first thing we do is to explain that we are not looking at who is and who is not literate, but at how literate everyone is.' UIS#6

The continuum understanding is one of the main black boxes to be sealed, though it appears a difficult one to close, as allies are negotiating their identities but also how their interests can be forwarded through the LAMP assemblage.

'We don't normally explore why countries take part, at least I don't, when a country expresses interest, we do not usually probe too much, but in many cases it stems from some misunderstanding of what LAMP is, sometimes a never-ending confusion about literacy rates, about the data we collect which is not literacy rates, we say 'We don't produce literacy rates' and countries say 'Can we produce literacy rates based on LAMP?', and we usually say 'We rather you didn't, if you are using methodology that is different and you are calling it the same as before, it would lead people to think there has been a change in reality but what actually changed was the methodology'. So we usually find out somewhere along the process what they want, it is better literacy rates, more reliable literacy rates, that they will be able to trust is very often what they say they want, because they have had different figures in the past which are not consistent with each other, they want to get the true literacy rates. I am not sure if they really understand or if they are just keeping us happy when they change their wording from dichotomous to a continuum discourse.' UIS#6

Each ally's understanding relates to how his own interests and agenda can be forwarded with LAMP. In the next phase, the *interessement*, multiple conceptualizations driven by differing interests, enter into LAMP's black boxes, in order for the network to assemble and negotiated identities to be performed. This is also the stage in which all allies adapt and adopt a new, vague language.

'One thing that varies is our willingness to cave into the literacy rates discourse, when countries say 'we want literacy rates' and I think we all have a different threshold in the sense of 'Oh well, I'll just let it be' but it is obviously an issue and a huge misunderstanding.' UIS#6

LAMP's human actors turn a blind eye on the local interpretations of the 'better data' claim, in order not to disrupt the interests of much-needed allies. LAMP would not exist without its country allies, and therefore finds itself adapting to its allies' interests. I thus argue that

although LAMP is built upon the black box of literacy measured as a continuum, it includes other interpretations.

Black box 4

The unquestioned truth is that literacy is to be viewed as a continuum of competencies that goes from poor literacy skills to proficient skills. Illiteracy no longer exists, nor do literacy rates (discussed in chapter one) which divide people into a dichotomy of literates and illiterates. These however are still to be provided annually.

The centre of calculation builds LAMP on literacy conceptualized as a continuum, although the UIS requests Member States to provide literacy facts shaped in a dichotomous conceptualization. LAMP finds itself within a schizophrenic environment enacting two literacy conceptualizations which contradict each other. Its Member States (including Lao PDR and Mongolia) join LAMP to provide facts conceptualized as a continuum but also have reason to continue valuing and producing literacy rates.

6.3.1.1.1 LAMP, black boxing this contradictory interpretations

In this section I try to further uncover how the dichotomous/continuum contradiction is black boxed in the LAMP assemblage, arguing that UNESCO's in-house conflictual approach to conceptualizing and enacting literacy as a dichotomy helps explain LAMP's tensions, but also how these very tensions are conducive to its allies' interests.

LAMP's conflictual continuum black box resonates with UNESCO's inconsistent literacy discourse which builds upon the use of multiple definitions of literacy (including both the dichotomous and the continuum understandings of literacy), which my UIS LAMP interviewees openly discussed.

'It's also very schizophrenic from UNESCO and other international organizations because there this whole thing about new approach to literacy but we keep asking them to produce literacy rates, that is most pressing, we give them all this, UIS ourselves, we are being inconsistent.'

UIS#6

'Discussing over there, some people they know what is LAMP, not to generate literacy rates, but most people don't, but not just Laos, even in UNESCO, there is a problem here and there.' UIS#4

UNESCO's request for literacy rates feeds into the way the Organization frames the literacy challenge in speeches, working documents and advocacy materials, and in its global announcement of the number of illiterates every year on 8th September - International Literacy Day.

'UNESCO 1958, General Conference, literacy is the ability to read and write a short sentence, UNESCO 1978, GC literacy is about the ability to function in society, UNESCO 2003, literacy is about reading, writing, numeracy, for different purposes, bla bla, if you ask UNESCO what literacy is about they are going to go to 1958, by telling you the number of people who cannot read and write. It is confusing for them.'

The literacy rates produced every beginning of September for International Literacy Day, if you compare the one from 2011 with the ones from 2009 and 2010, you will see different discourses, this new conception of literacy, in 2011 it says 780 million people who cannot read and write, who lack basic literacy and numeracy skills, but the literacy rates don't say that, the information that comes from the literacy rates is not good enough to say that, if they were, we should not be doing LAMP, in 2010 it says 780 million people are reported as not being able to read and write, which is a major difference, what are literacy rates about, reporting something that has a value, it says something about my perceptions and my identity, it does not say anything about my skills, and on the UIS website you are going to find these two different things. Two different areas are responsible for literacy rates and one for LAMP and even if we have tried to talk it is impossible, we tried in 2010 and we pushed a little bit, and in 2011 but they did not want to be pushed again, so in 2011 they produced without asking, and that is the UIS discourse,the UIS talks with the UIL in producing some documents on why we cannot talk about literates and illiterates, why there is no point in talking about eliminating illiteracy, next September, the DG is going to say there are 780 million people who lack the basic skills, don't make this lady say these things, the UIS is not providing a coherent discourse, I have tried for three four years, it does not work.' UIS#2

UIS requests literacy rates for the annual EFA Global Monitoring Report tables and for the 'illiterate world count' to provide shocking numbers on the 'literacy challenge', whilst at the

same time fighting the ‘eliminate and eradicate illiteracy’ concepts¹⁴⁹ and trying to enhance the understanding of literacy by inviting Member States to move away from measuring literacy as a dichotomy, and providing policy guidelines based on literacy as a continuum¹⁵⁰.

This brief insight into UNESCO’s literacy contradictory approach helps understand how LAMP has black boxed the continuum/dichotomy concept, but also why it is difficult for the UIS to clearly make its ‘better data’ claim. If better data is measured based on a literacy continuum, but at the same time countries are requested to send literacy data annually, countries will continue to apply the dichotomous concept to literacy measured as a dichotomy, with the extra bonus of eliminating illiteracy statistically.

This conflictual approach remains challenging for LAMP’s staff, one of whom recounted an unpleasant workshop during which he was confronted on UNESCO’s continuum which does not start from illiteracy but poor literacy.

‘She did say we are not clear, two-edged approach that does not really come together in a consistent way, ‘We are talking about how literate people are, and there is huge variation, bla bla’, and she said ‘Well, what are we doing here if you are saying there are no illiterate people?’ and I said ‘I am not saying there are no illiterates, I am saying that the problem goes beyond the illiterate people, that those who may claim to be literate or may have been declared as literate, are not literate in any practical sense.’ UIS#6

The story UIS#6 told about being publicly challenged for UNESCO’s contradictory approach is rather unusual. What is more common is that each actor furthers his own interests within this contradiction without openly stating it, but by adopting the vague language. This leads us to discuss first the perceived interests of LAMP countries in the ‘better data’ claim, and in the next section the Lao and Mongolian understandings and enactment of ‘better data’.

5.3.1.2 ‘Better data’ agendas: the Lao and Mongolian perspective

In this section I discuss how my Lao and Mongolian interviewees conceptualize the ‘better data’ claim and black box it to suit their own ‘better data’ agendas. Lao PDR and Mongolia are

¹⁴⁹ Because they are based on the concept of literacy as a dichotomy.

¹⁵⁰ This is not only available in UNESCO documents, but is also based on my interviewees perspectives, and my work experience at UNESCO working on adult literacy and NFE.

discussed together, rather than separately like in most sections, due to the limited interview extracts on the 'better data' claim.

My Lao interviewees did not openly state, as my Mongolian interviewees did, that LAMP would provide a better statistical picture of the Lao literacy situation. However, Lao#12 and Lao#10 did state that Lao PDR will have eradicated illiteracy by 2015 and needs to be ready by 2014.

'We feel we are fighting with the villages, they don't want to study but we have to achieve our literacy goals by 2014 in a hurry. But we need quality too. The only vision here is to eradicate illiteracy, we have no NFE and literacy vision. We will officially declare district by district to have completed Primary NFE by 2014. The President will stand in New York at the United Nations General Assembly and say 'My country has completed NFE and it is 98% literate'.' Lao#10

Lao#10 also told me a story that is not directly linked to LAMP, but that from a statistical strategy point of view resonates with enacting the 'better data' claim. Travelling for a couple of days to the north of Lao PDR, through its mountainous areas, Lao#10 pointed out a few perfect, model-like, empty villages and told me about the Lao enforced resettlement policy which the government has imposed on Lao communities who live in difficult-to-reach mountainous areas and lead self-subsistence livelihoods. The main reason why the villagers are obliged to leave their villages and resettle where the government decides is to stop farmers from slashing and burning the forests for rice fields (but also so the villagers will contribute to intensive agriculture). 'Look' Lao#10 said, *'They have a formal house here in the resettled village, but they go back to their own village. And the people sitting in the offices in Vientiane read the policy reports with good numbers and are very happy to see how well their policy has worked. And the farmers have got their solution. Everyone is happy.'* Relating this story to the LAMP story shows how those sitting in the office are concerned to get the right numbers, since they are probably well aware that changing the literacy reality will require a long time.

My Mongolian interviewees did not appear to show a different conceptualization of the 'better data' claim as perceived by the UIS LAMP interviewees in Lao PDR. What does differ, is the understanding of the process of how LAMP will produce the 'better data'.

'From 1990 we had a decade of new problems like poverty, school drop outs, low HDI, everything was getting worse so we needed to find a way to increase these numbers, change the bad results, and LAMP meets our needs.' Mon#17

'If you do the difference between GDP and HDI, it shows if the country has opportunity to develop and LAMP methodology says Mongolia has higher opportunities to develop, that's why we are interested.' Mon#17B

The extracts here above clearly state that LAMP methodology will portray a better statistical picture than previous measurements portrayed the national literacy challenge. This would not be the interpretation which UIS LAMP staff would reach, the UIS conclusions are no longer relevant at this stage. What is relevant is that each LAMP ally manages to project and further his interests through the LAMP assemblage. 'Better data' is therefore simply a point of convergence, through which multiple and contradictory interests are furthered.

To further make the point that countries appear to adopt the Programme and its language in order to further their own interest rather than LAMP's claims, Lao#13's statement is significant:

'We have to know their policy, what is ADB policy, what is WB policy, and then we adapt to theirs and then we pull towards the Lao policy' Lao#14

Although this interview extract once again does not directly refer to LAMP and international assessments, it quite clearly outlines the approach adopted by policy actors who deal with international projects. It is, as Steiner-Khamsi (2006) shows with the adoption of the 'universal language of educational reform', a question of adopting the language and agenda of partnering agencies, in order to win the assemblage's support, whilst at the same time piggy-backing interests and agendas of all allies.

In Mosse's (2004) view, the 'better data' unifying common narrative is 'supported for different reasons and serve a diversity of perhaps contradictory interests' (2004: 647). LAMP's vague, even ambiguous language, is what is needed 'to conceal ideological differences, to allow compromise and the enrolment of different interests, to build coalitions, to distribute agency and to multiply criteria of success' (Ibid: 663). Law argues that assemblages are rarely coherent and that it is more common for assemblages to include contradictory interests, which he describes as chronic multiplicity and which explain how the assemblage is 'differently in different places' (2007: 13). This might help explain how LAMP's better data converges allies whilst serving different interests and being enacted differently in each LAMP country.

5.3.2 Is LAMP's data valid or made valid?

Having looked at how the 'better data' claim is made, received and enacted by all allies, this section unpacks the black boxed concept of 'better data' further to understand how it is constructed not only by the centre of calculation, but by all the LAMP allies. I argue LAMP's better data claim is constructed as a regime of truth but also produced by an assembled validity.

LAMP's greater methodological and conceptual challenges (comparing across an even wider array of linguistic and cultural differences) compared to other international assessments facing less cultural and linguistic diversity, mean that LAMP's validity is less stable (and thus its black box sealing an important dimension) but essential for LAMP to achieve its aims in trying to create a niche for itself by producing equally reliable, cross-country literacy data.

The use of the validity concept in LAMP (as in other international assessments) is used to confer scientific authority to the Programme and its data when enrolling allies in its alliance which have come to accept LAMP as the solution (as seen in chapter four). I argue that LAMP's validity is externally constructed.

Drawing on Foucault (1980) and Flyvbjerg (1998) it appears that LAMP constructs its validity by choosing to represent literacy based on previously tested (and globally accepted) methods and instruments, thus establishing its representation of literacy in lower and middle income countries as the only truth. Supporting this understanding, Fenwick and Edwards state that ANT offers the lens to understand how complex processes are translated into calculable items that 'can exercise control in knowledge' (2014: 44). Drawing on Flyvbjerg (1998), I would argue that the power of 'validly' defining reality through international assessment regimes is constituted by defining what learning and literacy counts, informed and constructed by the instrumental and ideological purposes intrinsic to international assessments (and their history of the only reliable data on learning outcomes). This power is constructed through statements of measurement quality though it is put in practice through interpretation plausibility and the assemblages it constructs to socially defend the methodological and conceptual assumptions.

Moving toward externally constructed validity, LAMP's validity appears embedded in social values and the 'sound data for policy' rhetoric which the hegemonic agency of international assessments has generated through their extensive 'marketizing' but also the number of

countries implementing them. LAMP draws on this aura of authority that direct international testing have acquired. One could argue that LAMP's validity is pre-constructed by socially defensible values projected into the test instrument and procedures, that are external to the scientific, technical questions of measurements. This is supported by Foucault's (1980) general politics of truth. Applied to international assessments, the authoritative organizations producing international assessment numbers have defined procedures to represent what counts as literacy that it makes function and accepted as valid. They do this by applying 'the techniques and the procedures accorded value in the acquisition of truth' (Foucault 1980: 131) and by acquiring the position to state 'what counts as true' (ibid.)

From an ANT perspective, LAMP's validity also appears externally constructed, as it appears constructed by the durability and firmness of the LAMP alliance (the non-human actors - i.e. the international assessment instruments), the number of actors involved in the alliance, the interests projected into it and piggy-backed through the assemblage, and the black boxing of its conceptual and methodological weaknesses.

It is therefore not surprising that the *LAMP International Planning Report* established mechanism to win support of allies and fight potential alliances which might compete with it, thus putting its validity at risk. *'The goal of the national project team is: - to maintain the support of users who are initially supportive; - to win the support of additional users who may be neutral or mildly opposed; and - to address the concerns of opponents in a balanced and neutral way in all publications and related analyses.'* (2004: 11). Not only does one of the main non-human actors in LAMP state that it is the responsibility of all actors to support and protect the LAMP assemblage (and thus also its black boxes), but it also legally binds the allies in the Memorandum of Understanding to prevent them from disassembling.

'A party may withdraw from the memorandum of understanding by providing acceptable rationalisation for its decision at dates to be specified in the project schedule. Dates will include possible withdrawal after the field-test, before the main data collection.' (MoU: 5)

This ANT view is supported by Latour's (1987) discussion in *Science in Action* about how scientific facts are made true (whether they are or not) and maintained as such by the process of bringing in allies who work together to support a claim or state a fact. A fact is made true by a large number of allies which in the case of a scientific discovery will include the technologies

used for a discovery, the journal article in which the idea is published, the references that support the claim, the peer reviews, the authoritative journals, the prizes awarded to the author, etc. Latour claims that 'A few win over the many because truth is on their side' (1989: 31), as the truth is not given by the facts itself but by the robustness of the assemblage the fact has created around itself. Scott-Smith states that 'at its heart, this approach involves a central provocation, which reverses the way that science is usually viewed. Rather than starting from the idea that people are persuaded about facts because the facts are true, ANT suggests that facts are true because people are persuaded. In other words, the strength of any scientific claim is attributable to the number of actors who participate in the maintenance of the claim (Latour 1987)' (2011: 3). Or in Latour's words,

The point here is that the easiest means to enroll people in the construction of facts is to let oneself be enrolled by them! By pushing their explicit interests, you will further your own. The advantage of this piggy-back strategy is that you need no other force to transform a claim into a fact; a weak contender can thus profit from a vastly stronger one. (1987: 108)

But what does this mean in non-ANT terms? LAMP's validity is built upon an aura of high quality derived from the status acquired by well-marketed direct international assessments, the 'advanced' statistical methodology (i.e. Item Response Theory algorithms), its rigorous procedures (sampling, weighing, etc.), its allies (i.e. governments, testing agencies, ministries of education and statistical offices, international organizations, international testing instruments, etc.) that join international assessments to further their diverging interests, thus maintaining and increasing the level of trustworthiness that is attributed to LAMP (and other international assessments) data. Measurement quality, labelled by authoritative international institutions as 'scientifically valid', becomes strong and solidified through the interests the Programme furthers, and not through tests of validity (i.e. DIF tests). LAMP's data is made valid through its instruments and methods (whether they are good or not), but by the robustness of its assemblage.

To support this understanding of assembled validity in LAMP, it is significant that in an early LAMP meeting, the director of the Programme was documented¹⁵¹ to have stated that quality

¹⁵¹ This statement was made during the test item development meeting in which countries discussed the nationally produced test items and the share of international test items (from IALS) in LAMP.

of the data alone is not sufficient without a strong and convincing communication and dissemination strategy carried out by all actors involved (including politicians, administrative staff, journalist and end users). This suggests that although the validity may be (or not be) intrinsic to the test instruments (Zumbo 2009), the data is not valid without an assemblage of allies who can make the data valid (making a statement true or false, as seen in *Science in Action*).

Although Newton and Shaw (2014) argue for a scholarly consensus over the conceptualisations of validity¹⁵², from an ANT perspective, it may be the vagueness and malleability of validity (as with the 'better data' claim) that allows LAMP to assemble its validity through its allies' interests. In other words, validity becomes a 'rationalizing' feature assembled through pragmatic interests.

5.3.3 Conclusions to LAMP's 'better data' claims

In this section I have discussed how LAMP's 'better data' claim is constructed and enacted by LAMP's human and non-human actors at the centre of calculation and in Lao PDR and Mongolia. Firstly I unpacked the multiple interpretations and interests projected into LAMP's claim and then discussed how LAMP manages to black box these multiple conceptualizations.

UNESCO's contradictory understanding of literacy as a continuum whilst at the same time enacting literacy as a dichotomy, appears to have been black boxed and used by LAMP's allies to further multiple interests. LAMP's *language of convergence* and contradictory black boxes are strategic in providing its allies with statistical leeway, thus concealing different interpretations and interests and acting as a point of convergence. Allies joining the LAMP assemblage adopt a negotiated identity with the malleable language and agenda because it allows their interests to be piggy-backed.

Stated differently, LAMP's allies join the LAMP assemblage to further their own interests by adopting LAMP-adapted identities and its vague language. It is the very vagueness and malleability of LAMP's language that allows LAMP to gather allies through which it assembles durability and robustness to construct its data as valid.

¹⁵² The field of Critical Language Testing (Shohamy 2001; Roever and McManara 2006) also deals with the different conceptualizations of validity in assessments (including the social and political meanings and implications of testing) and is a movement which speaks directly to International Assessment Studies.

5.4 LAMP's claim: to compare. Or maybe not.

In this section I discuss how LAMP constructs itself as a programme which provides internationally comparable data whilst at the same resisting the comparative approach in the name of respecting cultural diversity. After analysing how LAMP's human and non-human actors at the centre of calculation enact this conflictual approach to comparisons, I discuss how this claim is received in Lao PDR and Mongolia. I argue that LAMP's comparative claim represents one of the main rationales for Lao PDR and Mongolia to join LAMP. Their interest in comparing is better understood in terms of 'surveying for competitiveness' (Darville 1999) and measuring 'the gap' with chosen reference societies.

As we have seen previously, Cussò and D'Amico (2005) state that UNESCO's principle of cultural and linguistic diversity respect implies the Organization does not rank its Member States but describes them in their cultural and linguistic richness. This contradicts LAMP's methodological basis developed with IALS methodology, which technically allows for ranking (Thorn 2009). The *LAMP International Planning Report* states that its methodology allows countries to measure themselves against other LAMP countries but also OECD countries participating in IALS and ALL (thus leading to rankings based on literacy averages).

'The methodology is designed to achieve comparability both within and among LAMP participating countries as well as IALS/ALL countries.' *LAMP International Planning Report*¹⁵³: 4

Apart from the rationale of providing technical expertise in the development of international assessment methodology, LAMP's rationale for 'cross-country comparability' seems rather weak.

'Analysis of data from the IALS study demonstrates that directly tested literacy levels are far more variable across countries than suggested by differences in national profiles of educational attainment. This suggests far more variability in the quality of initial education than generally assumed, a fact that has been confirmed by international comparative assessments of students

¹⁵³ The Report also states 'Countries will be able to compare their results against international data on literacy obtained from the International Adult Literacy Survey (IALS) and ALL.' (Ibid: 5)

such as the OECD PISA study, IEA's TIMSS and PIRLS studies and UNESCO OREALC¹⁵⁴'s mathematics and reading assessments.

The comparative dimension of the LAMP study will also allow users to explore, through statistical analysis the influence of various background questions on literacy, where policy might have the most impact.' LAMP International Planning Report: 14

The rationales for LAMP's internationally comparative nature are translated into its standardized procedures and its testing instruments, which, as we have seen in the previous sections, manage to win the battle between local adaptability and standardization. The 'standardization' success suggests that the comparative nature of LAMP is what strengthens the LAMP assemblage by appealing to allies interested in comparing themselves.

LAMP's non-human actors were developed to meet LAMP's comparative needs, and were enacted by its first human actors (this assertion is based on the analysis of LAMP correspondence from the Programme's early days). When its main human actors at the centre of calculation changed in 2007, they were substituted by actors seeking to put LAMP '*in tune with its true purpose*'. It is interesting therefore, to understand how my interviewees enact LAMP's comparative claim.

Although one of my UIS LAMP interviewees stated that she would describe LAMP to a non-expert as '*we try to draw a picture of the countries' skills and where they stand*' (UIS#7) thus highlighting the Programme's comparative nature, she then explained that LAMP comparisons will not be made and that this will create problems for the LAMP countries whose negotiated identities were built on the comparative claim.

'What are trying to do now with my colleague¹⁵⁵ and the team we are moving away from this idea of comparability across countries, we really are, and our report is going to disappoint a lot of people because a lot of people are expecting fully comparable results, that is not going to happen, you have fifty seconds to read a sentence, in one language it is forty-one words and in another it is eighty words, if you can get to the end of a passage of 100 words in fifty seconds you are lucky, even a fluent reader won't be able to do it, or he will be able to do it but he'll

¹⁵⁴ Oficina Regional de Educación de la UNESCO para América Latina y el Caribe (the UNESCO Regional Office for South America and Caribbean).

¹⁵⁵ I have changed the name of her colleague to 'my colleague' for confidentiality.

mumble the words, so you cannot compare one language to another, there are some items that can be compared across countries and we will do that.

Me: What do you think the benefits of comparability across countries are?

There aren't any, zero. Ranking? Zero. I've never really understood why governments want it, maybe if we could do LAMP a second time and talk about the changes that were made, then we'd have grounds to explain the different actions that we are making to improve the situation or not, but now just comparing which percentage of the population has level one, we will put it out there, on a stacked graph, this many in this level in this country and so on, we will do that because we have to, because it is a mandate and we have to do it.

So Paraguay apart, Mongolia and Palestine, and Jordan a little later, I don't know how they were chosen, with time they have come to accept that we are not going to be able to say one is better than the other.' Uis#7

The extract here above clearly displays the LAMP tensions at the centre of calculation where the team is both providing what '*we have to do*' (LAMP's official mandate tied down by its non-human actors) whilst at the same time moving away from comparability. LAMP appears built upon a black box which deals with its comparative claim in a conflictual way, which may act in a similar manner to the dichotomy/continuum tension, by allowing ally identities to be formed to suit different interests.

Although LAMP is moving towards its '*true purpose*' of not comparing and the number of countries actually producing comparative data is rather scarce (only 4 countries), LAMP countries do not appear to '*have come to accept*' that LAMP will no longer be comparative. Indeed, it emerges as one of the main claims to have motivated countries to join.

Black box 5

The unquestioned truth is that although LAMP aims to build diversity into its data, it also constructs the data as validly comparable across countries and with other international assessments carried out in higher income countries.

The centre of calculation enacts its comparative nature through the standardization of its non-human actors whilst the human actors try to move LAMP towards its 'true purpose' of diversity relevance. Lao PDR and Mongolia value LAMP for its cross-country comparability nature to measure their global competitiveness and the gap with reference societies.

5.4.1 Where are we in the world?

In this section I discuss how the comparative claim is received in Lao PDR and Mongolia to understand how countries enact the centre of calculation's black boxed tension as seen above, but also how LAMP's 'retracted' claim is re-negotiated. In both Lao PDR and Mongolia interviewees take LAMP's comparative claim by the word and argue that they need international assessments to measure and compare their competitiveness against chosen reference societies and, in the case of Mongolia, to also move towards 'international standards'.

My Lao interviewees did not question the ability of LAMP's methodology to validly compare across countries but strongly welcomed the claim as a means to measure how Lao PDR is progressing compared to its reference societies. By producing international educational benchmarks, Lao PDR will be able to know '*how is Laos*'.

'We have to do how they do and then compare ourselves.' Lao#14

'A survey, any survey, to know ourselves, our rates, how is Laos.' Lao#12

From the latter interview extract it appears that it is not the particular conceptual and methodology framework behind each international assessment that counts, as '*any survey*' will do. This may explain why Lao PDR was preparing to carry out EGRA, PASEC¹⁵⁶, LAMP and had

¹⁵⁶ *'Laos is going to take part in measuring learning outcomes with the French system PASEC. There is a test at the beginning of the year and another one at the end of the year. Vietnam and Cambodia are doing it too. Obviously*

also just taken part in the STEP Skills Measurement Study¹⁵⁷ at the time of my fieldwork. There seems to be a strong interest in implementing assessments, so long as they are internationally comparative. My Lao interviewees justified their need to compare because they have ‘to survive in a context of globalization and competitiveness’, thus implying that comparative knowledge would provide Lao PDR with a better understanding than national indicators would.

‘We have to survive in a context of globalization and competitiveness and give a future to our children. We have to reduce the gap with other countries – this is the pressure – and so we need to build our capacity. Lao are by nature skilled, but TVET makes skills competitive. With the WB and ADB we are working with future investors to understand what skills they need in order to plan both TVET and higher education to attract more foreign investors. How to respond to the next year needs. Education for the country’s sustainable development. We have to learn from western countries how to have this approach. We have to understand how to get foreign investment and provide education for their needs – what skills do they need? Investors and employers have to partner with us for their own interest. It is time to act, time for Laos to take it seriously, if we don’t make efforts now we will lose.’ Lao#13

Even though Lao PDR and Mongolia are at different stages of economic development, they both appear to be strongly driven by the perceived global competitiveness race and need to understand ‘where we are’ in the league tables compared to other countries. My Mongolian interviewees supported this claim.

‘After 1990 there was a big change in the education system, we want to see where Mongolia is, where are our mistakes, where to improve. We are starting to talk about quality in Mongolia and LAMP was an opportunity to see our education and to measure it by international standards. LAMP will help us focus on quality, it will tell us how the quality of education is, where we are, what we should do. People’s attitude is changing, talking about the environment and the instruments, they are understanding about the quality of education not just teachers

adapted to Lao curriculum but same concepts, methodology. This way we know the quality of our education compared to other countries.’ Lao#14

¹⁵⁷ The STEP Skills Measurement Study was carried out by the World Bank in thirteen lower and middle income countries. It measures cognitive skills (within this section, literacy was assessed based on the core test of PIAAC), socio-emotional skills and job-specific skills. Interestingly, none of my interviewees mentioned Lao PDR’s participation in STEP.

and students. Cambridge was engaged by the last government to bring the Mongolian educational system up to standards.’ Mon#17

Once again, my interviewees insisted on where they are compared to other countries and to international standards as a way to increase their knowledge and skills competitiveness.

‘There is huge foreign investment here, investors want to recruit, but our skills are not at level, so we really need to look at where we are in the world. If you are a developing country, then the country has interest to show others ‘if you are developing, where are you now?’ Mon#22

My interviewees seem to unanimously agree that international assessments will reliably show where they stand in the world and how to achieve an international level of education (this is discussed below). The main difference between the Lao and Mongolian context is that my Mongolian interviewees had a strong opinion about who they were measuring themselves against and that the comparative claim in LAMP would help them in their strive towards international standards.

One of my interviewees in Mongolia distinguished between her interest (more research oriented) which is more national than policy-makers who she sees as more focused on comparative knowledge.

‘The national LAMP report is the most important thing, it will help us here, they just think about comparing countries, for us it is about the national level.’ Mon#17

Mon#17 then added that she is also interested in LAMP’s comparative nature. *‘LAMP is interesting because we can compare with other countries where we are. We need to measure literacy by international standards. We like to compare but we are sometimes compared to African countries and it is funny for us. We don’t like to be compared to Africa but if we continue like this maybe it will be a good comparison in twenty years. I want to compare with Canada, USA, other countries like Paraguay I don’t know how to compare them to Mongolia. We cannot compare to Paraguay, it is so far.’ Mon#17*

LAMP’s comparative claim has been picked up by Mongolia decision makers, who have accepted their adapted identities and sealed its black boxes in order to be able to compare with higher income countries and not LAMP countries. Mongolia’s neighbours, which my interviewees described as crushing, are key to Mongolia’s need to compare and compete.

'Mongolia puts a lot of effort into education because it must have higher levels of education compared to Russia and China since it is between two super countries and Mongolia has a small population and there are many immigrants from China. Look at our neighbours, Russia and China, they are powerful so we must look to Europe and America and Philippines. Mongols should have the same level of education as the rest of the world. With LAMP we can compare with other countries. We should compare with European countries ... and Asia Pacific countries.'

Mon#25

The rationale of competing that is brought into the argument by both my Lao and Mongolian interviewees, correlates with Dale's (1999) thesis that sees countries reorganizing their educational priorities to make them more competitive, thus letting the neo-liberal paradigm take over their educational approach. Furthermore, the economic approach to education in the neo-liberal social imaginary, correlates with the interest of countries to measure their human capital in terms of competencies along a continuum of skills.

It is interesting to ask to what extent joining international assessments is part of a process which Novoa and Yariv-Mashal (2014) call mutual accountability (accountability and the audit culture are as discussed in chapter two as reasons to understanding why lower-middle income countries join international assessments). As with mutual accountability, it might be suggested that countries submit to being compared through international indicators, considering it more beneficial to be part of such processes than not being in the resulting league tables. A process that countries accept to take part in to avoid being labelled as non-transparent and non-accountable. As suggested in my findings, to be ranked is better than not ranking at all, whatever the position in the league table. In line with Kamens' (2013) statement that evaluation has become a requirement for all, my interviewees do suggest that measuring their literacy skills against reference countries is a means for Lao PDR and Mongolia and international organizations to measure their development progress.

5.4.1.1 International assessments: a way to achieve international standards?

My interviewees insistently stated that in order for Mongolia to achieve higher or similar levels of educational standards to its chosen reference societies, its educational system has to be measured by 'international standards' and move towards them. In this sense LAMP represents international standards, though it is not clear if the averages or scores of top-scoring

educational systems are what my interviewees consider benchmarks of international standards nor how participation in international assessments will allow Mongolia to reach these standards.

'LAMP shows the international level of education.' Mon#17B

'The Mongolian educational system is moving to international standards by changing from a ten to an eleven year system (5+4+2) and by contracting Cambridge to bring the Mongolian primary and secondary curriculum, also teacher training, assessment and textbooks, up to international standards. We need to move to an international level, we need to match international levels because of globalization. The Mongolian curriculum is more academic and theoretical, we saw the Mongolian skills were lower at the end of secondary school but we need to be like European students. Mongolian students need to be globally competitive. Mongolian students need to be competitive for the world.' Mon#20

Unpacking my interviewees perspectives, international standards combine a multiplicity of meanings, including: identifying how to catch up with best performing economies, converging towards globally valued curriculum, being able to benchmark educational outcome gaps but also competitiveness gaps, showing understanding of how and where Mongolia ranks.

Alternatively it may be that international assessments represent international standards in the same way as Steiner-Khamsi and Stolpe (2006) argue that global education concepts are used. They argue that Mongolian policy actors reference 'globalization' and 'international standards' to accelerate change, though the words 'are empty shells that may be filled with whatever is needed to promote controversial reforms' (2006: 332) which are not external forces 'but rather internally induced and reflects, more than anything else, the domestic policy context. Its meaning is determined domestically' (:ibid). Steiner-Khamsi and Stolpe also argue that using this international education reform language is adopted by a country as a means to 'affirm its membership' (2006: 124).

5.4.2 Conclusions to LAMP's comparative claim

In this section I have looked into LAMP's black box which seals the claim that LAMP can produce cross country comparative data whilst at the same time dismissing the value of comparing and ranking. My interview extracts show how the centre of calculation's human

actors cope with this tension with difficulty as they argue that LAMP countries have accepted that LAMP data will not be comparative.

Although the centre of calculation has tried to renegotiate the comparative claim, its allies' identities do not appear to have been renegotiated. There may be few LAMP countries to compare against, but the *LAMP International Planning Report* claims LAMP methodology consents comparison with IALS and ALL countries. My Lao and Mongolian interviewees dismiss the comparative controversy entirely and make their need to know '*where we are*', driven by a need to measure knowledge capital competitiveness (Grek 2014) and the gap with reference societies, one of their main reasons to be part of LAMP.

It is a paradox that Lao PDR and Mongolia have joined LAMP, *a smaller alliance* in the *web of multiple alliances*, though their attention is drawn to higher income countries as reference societies, which are not on the LAMP scale. A particular paradox is the Mongolian case, as it participates in LAMP but is concerned about being compared with the other LAMP countries (as seen with Paraguay) and tries to distance itself from them¹⁵⁸.

Lao PDR and Mongolia have adopted the neoliberal social imaginary in education (discussed in chapter two) which international assessments have contributed to institutionalizing and spreading. This supports Dale's (1999) argument that globalization has reorganized countries' educational policies around increasing global competitiveness. The competitiveness rationale that drives Lao PDR and Mongolia is at odds with LAMP's overarching objectives, but correlates with the IALS methodology which LAMP is built upon.

The need to compare and compete supports Phinith et al.'s (1998) concept of market socialism seen in chapter two. Although Lao PDR defines its government as socialist, my interviewees' concerns suggest the country has moved towards market socialism (in so far as education is concerned).

5.5 Conclusions to LAMP's claims

In this chapter I have discussed how LAMP's main claims are performed by its human and non-human actors at the centre of calculation and in Lao PDR and Mongolia.

¹⁵⁸ Those giving me permission to carry out research in Mongolia specifically and repeatedly asked not to make comparisons between Lao PDR and Mongolia.

Firstly, I discussed the policy claim that LAMP constructs to justify its existence as a policy initiative, stating that countries need LAMP to be able to *formulate and monitor appropriate and effective policies*. By establishing the problem but also the solution, the UIS enacts the problematization phase by making itself indispensable for all the actors who come to recognize the problem of ineffective literacy data and policies, thus negotiating and shaping the new identities of the actors that join the LAMP assemblage. The negotiated identities include the acceptance and sealing of all the blacked box LAMP truths. This means LAMP allies accept to take for granted that LAMP will produce internationally comparable, context relevant data on literacy measured as a continuum for countries to formulate and monitor effective policies.

As seen throughout chapter five, the UIS and the LAMP countries (including all the actors and non-actors mentioned) are translated into a heterogeneous assemblage striving for LAMP's aims whilst furthering their own interests. I have argued that it is the Programme's vague language and conflictual black boxes that act as a point of convergence by strategically bringing together and concealing the different and at times conflictual interests of all allies. Based on this understanding, I have made the case for LAMP's data validity being assembled through its allies and their interests.

Another claim I have discussed is the standardization versus diversity conflict in LAMP. Although UIS LAMP constructs its data as context-relevant based on valuing diversity (and Lao PDR and Mongolia appear to value this claim), Lao PDR and Mongolia are more concerned with measuring a form of global literacy. This global literacy is justified by the need to cope with globalization and be globally competitive, which leads to the issue of international comparability of literacy levels.

LAMP's conflictual approach to comparing countries plays a significant role in the assemblage. In order to enroll countries into LAMP, the Programme makes a strong case for comparison not only amongst LAMP countries but also with IALS and ALL countries. This has been translated into LAMP's testing instruments and processes. As we have seen in chapter two and five, this leaves UIS in a difficult position, as its original purpose was to value cultural and linguistic diversity is not at ease with standardization and rankings. Although the centre of calculation attempted to revoke its comparative claims, LAMP countries had negotiated their identities to include this claim and have remained keen to generate comparative technologies and knowledge (Fenwick et al. 2014). My Lao and Mongolian interviewees made a strong case for

their need to measure themselves against their reference societies. My Mongolian interviewees also insisted on the need to compare as a means to reach international standards in education; whether this is 'talking international standards' to enter the alliance of their valued communities or actually improving learning quality by looking outside is a question of interpretation.

Chapter Six Exploring what LAMP does not claim but drives participation

In chapter five I have discussed how LAMP constructs claims about what it offers its allies and how these are enacted (or *not* enacted) by its human and non-human actor-networks at the centre of calculation and in Lao PDR and Mongolia. By doing this I give a partial answer to the question ‘what drives lower-middle income countries to join international assessments?’. In this chapter I seek to further unpack the question by looking into what LAMP does not claim to do but which Lao PDR and Mongolia appear to be gaining (or trying to gain) through their participation in LAMP.

What appears from my data analysis, but also informed by fields of research and theories¹⁵⁹ I draw upon, is that LAMP offers its allies unclaimed opportunities which countries project into LAMP (even though some of these contradict LAMP’s ‘*true purpose*’). The following sub-questions help uncover the unclaimed advantages of participating in LAMP.

- To what extent are countries interested in the LAMP process as opposed to LAMP outcomes?
- What strategies is LAMP data intended to be used for?
- How do personal and unaccountable rationales take part in the decision to join LAMP?

These questions uncover a more complex picture that drives countries to join international assessments, which support Wiseman (2013) and Grek’s (2009) arguments for participation discussed in chapter two. The rationales that emerge through these questions are piggy-backed through LAMP’s assemblage, whether they contradict LAMP’s purposes or not.

In this chapter, it emerges that Lao PDR and Mongolia join the LAMP assemblage with an interest that focuses on the process of being part of an international assessment process or more widely, part of the global trend of international assessments. I call this a *global ritual of belonging* and argue that not only Lao PDR and Mongolia are driven by this rationale, but also the UIS.

I then discuss the strategies that Lao PDR and Mongolia project into LAMP and discuss strategies such as ‘scandalizing with international numbers’ and ‘glorifying with international

¹⁵⁹ Further details are discussed in the introduction to chapter two.

numbers'. Finally, I argue that understandings of governmentality in assessment need to be revised in light of the international and comparative character of educational governance.

In chapter five I started each section discussing the non-human actors and the perceptions of my interviewees at the centre of calculation and then discussed my Lao and Mongolian interviewees' position. In this chapter, because I am looking into the rationales which Lao PDR and Mongolia construct, I discuss the periphery's perception first and then move to the centre of calculation.

6.1 The LAMP process, a global ritual of belonging

In this section I start out by looking at the multiple international assessments which Lao PDR and Mongolia have joined in recent years. I then discuss how countries appear more interested in being part of the LAMP process than in the data. What emerges is an almost desperate need to be part of whatever educational trend has picked up momentum as a way to be part of '*one global country*'. I call this a global ritual of belonging, which implies being ranked and rated, as a form of global legitimization of national education practices and policy. This helps understand why the politics of reception of international assessment data are not always correlated with the results (Martens and Niemann 2013) but with the rationales for joining international literacy assessment.

At the time of my data gathering (in 2012), further to participating in LAMP, Lao PDR was taking part in a regional assessment for francophone countries (PASEC) and EGRA (another large scale assessment - defined a hybrid by Wagner 2010). In 2011, Lao PDR also took part in the international STEP Skills Measurement Study.

'Lao is taking part in measuring learning outcomes with the French system PASEC¹⁶⁰. [...] Vietnam and Cambodia are doing it too. Obviously adapted to Lao curriculum but same concepts, methodology. This way we know the quality of our education compared to other countries.' Lao#14

What is interesting in the above extract is the additional information which my interviewee felt the need to add: which other countries which are taking part¹⁶¹, and the fact that although the

¹⁶⁰ This is carried out in francophone countries – for a list of countries see <http://www.confemen.org/le-pasec/>

¹⁶¹ Lao PDR often acts in unison with its neighbouring countries, especially Vietnam, especially as regards political

instruments are adapted to the Lao curriculum, the methodology *is* the same, thus making the data comparable.

The statement ‘*A survey, any survey*’ Lao#12 seen in chapter five, can be read in terms of Lao PDR being willing to join any international assessment to measure its educational systems against international benchmarks, but it may also mean that any survey will do, as long as Lao PDR joins the international assessment trend. Lao PDR does not question the quality of international assessments and their conceptual and methodological features (which will of course impact on the outcomes), but wants to participate. To take part and to be part, so long as they *are* part – ‘*we cannot live alone*’ Lao#13.

At the same time, in 2012, Mongolia had carried out TIMSS in 2007 (funded by a World Bank grant but implemented by the Mongolian Education Evaluation Centre) though the results were dismissed due to technical errors. TIMSS was implemented again in 2011 (also funded by the World Bank and implemented by international consultants selected by the WB) but the government decided to drop out after the 2011 pilot test when everything was ready for the main assessment (handing back the WB grant for the main assessment). In 2012, Mongolia had also been involved in LAMP for nine years.

Further to these three international assessments, in 2012, the new Mongolian minister of education (only just elected in 2012) had asked the WB to provide him with the full range of international assessment opportunities for him to choose from.

‘The Minister is interested in international assessments and asked if the WB could help, but the WB said they have to be serious this time so they said they would discuss internally. They asked the WB to offer them all the options of what international assessments can be done, PISA, TIMMS, EGRA,...’ Mon#26

In 2013, PISA for Development started being developed by the OECD in collaboration with the WB, UNICEF and UNESCO among others. PISA for Development is at an embryonic phase in which five lower and middle income countries will pilot the Programme. In 2013, experts involved in the development of the Programme informed me that Mongolia is one of the five pilot countries.

A history of joining a whole variety of international assessments and the co-existence of international assessment alliances, shows there is keen interest in being part of this global trend. But how would ANT make sense of these multiple, if not parallel alliances? During the *problematization* phase of ANT, it is suggested that the obligatory passage point (in this case UIS) weakens connections with other competing actors and alliances (i.e. other international assessments). This describes the case of Vietnam abandoning LAMP to the PISA alliance¹⁶² (a *web of competing alliances*). In the case of other countries, it appears that multiple international assessments co-exist at the same time and appear to re-enforce other international assessment alliances, making the case for different data needs for policy and planning. Belonging to multiple alliances may be more beneficial than only belonging to one international assessment alliance. Joining multiple assessment alliances could be described and seen by the global eye as countries ‘embracing the trend’. This supports the case of the *web of multiple alliances* in which participation in more than one alliance at the time can mutually reinforce other similar alliances.

If the interest of Lao PDR and Mongolia is in taking part in international assessments rather than an actual need for the numbers to inform their policies, this would explain why Mongolia has been content with being part of the process for 9 years without getting any results and why Lao PDR has been part for more than three years before actually starting the LAMP implementation process (i.e. setting up a LAMP team). It might be more convenient to be part of a global process, whilst at the same time not having to deal with the out-coming numbers.

6.1.1 ‘We have to keep with the trend of the world’

In this section I discuss my Lao and Mongolian interviewees’ perspectives which assume that no country can afford not to be part of international assessments, the worldwide education trend of the moment.

It emerges through my Lao interviewees perspectives that being part of LAMP is about being part of a valued larger community which keeps a country going forward rather than going under. ‘We cannot live alone, you need to move’ or ‘we will lose’ (Lao#13) implies a country risks falling out of the global race, in which there are no boundaries to hide behind. The interview extracts below read as a desperate need to stay afloat in a fast-moving, competitive

¹⁶² And achieved comparatively outstanding results.

global economy, by joining forces, in order to find a place on the map and be part of 'one global country'.

'We have international commitments, you have to justify if you cannot achieve it. Goals are ambitious but feasible if done through strategic planning. We have to keep with the trend of the world, we need to link to what is happening. You have to see how to integrate into the region, you are not isolated. You have no more boundaries, and education should think like that. ASEM is a living context block, we cannot live alone, you need to move.' Lao#13

'We will not stay alone anymore, we have to step forward with others, with the international community. But you have to show your ownership and your identity. With the others you become one global country - we rely on someone else.' Lao#10

'With globalization we do not stay alone, we do not live alone, we cannot say we are alone and that we don't need the others, we are connected to the world. International migration for labour means we need to link to other countries' curriculum. We do not drop Lao way of doing things but we have to adapt to the world.' Lao#14

'Being part of what is happening' in 'one global country' becomes a strategy, which Lao PDR exchanges with a commitment to strive towards whatever the international education community has chosen to value. LAMP is therefore a choice of allies (as seen with Steiner-Khamsi and Stolpe 2006 in chapter two), as stated in a significant interview extract from one of the highest level policy actors in the Ministry of Education of Lao PDR.

'If the international use literacy rates, we have to use Lao literacy rates, if they get rid of it, Laos gets rid of it too.' Lao#14

This statement relates closely with Steiner-Khamsi and Stolpe suggestion that 'politicians and policy makers increasingly make de-territorialized references to an imagined international community' (2006: 201) through which they generate internal pressure to not fall behind international standards and be labelled as behind.

Lao PDR does not mind which conceptualization of literacy and assessment methodology LAMP is built upon, either conceptualization will do, so long as it will serve the country's agenda of being part of what the rest of the world or Lao's valued larger community has chosen to value. This approach resonates with the statement Lao#14 made in chapter five in which he states

that Lao PDR adapts to the agenda of international organizations before making their agenda serve the Lao agenda. Thus Lao PDR will change its way of discussing literacy, as a continuum now and as a dichotomy later if necessary. LAMP's aim of changing the way literacy is understood will appear achieved, but what Lao PDR is doing, is speaking the language of educational reform for political and economic alliance gains, as suggested by Steiner-Khamsi and Stolpe (2006).

The way my Lao interviewees constantly referred to not being alone but being part of one global country resonates closely with my Mongolian interviewees' need to 'bring Mongolia up to international standards' and wanting to be in line with global trends in education (as seen in chapter five).

One of my interviews with a Mongolian policy maker who, at the time of my fieldwork, was involved in the development on the Mongolian educational reform, was particularly informative of Mongolia's need to be part of what is happening. Just as I was packing up to leave after a not-so-revealing interview¹⁶³, my interviewee turned to me with unexpected enthusiasm. He explained that the computers at the Ministry of Education no longer had access to non-Mongolian websites and asked me if I could do some research for him. Unexpectedly he was keen to see me again for another interview to make use of my potential expertise.

'I need to see what other countries are doing. Are they doing school-based management? Where are they going? Where? Can you help me?' Mon#20

The moment he finally expressed his main worries and concerns turned out to be the most revealing moment of the interview. His need to 'go' in the direction other countries are going in with their educational systems at policy level would take the policy-decision-burden off his shoulders and bring the legitimizing power of 'policy borrowing and lending', which both Waldow (2012) and Steiner-Khamsi (2012) discuss. I argue that conforming at policy level, by being part of what is happening in education, whether it is successful or not, also conveys legitimization power.

¹⁶³ This was because my interviewee was very busy and getting ready to go with the Minister of Education to visit schools in the poor yurt-suburbs of Ulaanbaatar (the capital city).

In the same way as Lao#14's statement on adapting to the agendas of international organizations relates to Lao PDR's engagement with LAMP, I argue that Mon#20's statement is revealing in terms of Mongolia's engagement with international assessments. It describes a need to be part of what 'the international' is doing – '*where are they going?*' - in order to not fall behind. In the case of international assessments and literacy in particular, Mongolia not only does not want to fall behind but actually sees itself as the world player, setting the example for all others, and thus LAMP is an opportunity to lead rather than follow.

'Mongolia is the main player for literacy in the world and need to measure literacy quality, these are the main reasons why Mongolia took part in LAMP – also because Mongolia really values literacy, it is our duty, to since Mongolia is a big player in literacy and also started UNLD'
Mon#28

My Mongolian interviewees seem to have taken the LAMP MoU statement 'these countries¹⁶⁴ will become literacy assessment leaders and advisors in their respective regions.' (MoU: 1) by the word. It is a fact that at UNESCO, and within the main UNESCO literacy initiatives, that the Mongolian Member State has played a leading role providing extensive support to UNESCO's adult literacy activities, especially the United Nations Literacy Decade and LAMP.

This need to belong which I call a 'global ritual of belonging', does not appear to focus on the outcome of the process but on the process *per se*, and although it emerges more clearly in Lao PDR than Mongolia, I argue that both countries feel a pressure (which is likely internally and externally induced) to participate in global educational trends in order to be 'on the map', whatever the numbers may say.

I argue that globally belonging to multiple alliances of international assessments represents a means to getting closer and being 'recognized' by the larger valued community, the *greater alliance*. Belonging to international assessments, whether one or a multiplicity, is thus used as a form of soft power (Wiseman 2013).

The global ritual of belonging correlates with Sellar and Lingard's theory which suggests that international assessments have a self-perpetuating nature. The greater number of countries participating, the greater the interest of other countries (including lower and middle income

¹⁶⁴ Referring to the LAMP pilot countries.

countries) is to join in the subsequent rounds as assessments increasingly become a global trend all countries want to be part of rather than risk being an empty line in the tables or absent in the league tables.

Globally belonging through international assessments may also correlate with Kamen's theories, (i) that countries in Eastern European, Central Asian and North African Arab and Middle Eastern countries join international assessments to benefit from the 'prestige of competing and benchmarking themselves against the exclusive club of rich countries represented by the OECD (Stephen Heyneman, personal communication)' (2013: 124); and (ii) that being part of international assessments 'make ministers and ministries look good at international conferences and events. They and their countries get good reputations for actively pursuing modern values' (2013: 128).

I argue that the global ritual of belonging is a process of legitimization through which countries are stamped onto a map of allies in the global drive for economic competitiveness. Wiseman (2013) suggest international assessments provide countries with legitimacy and credibility by belonging to a group of countries which value public education. This argument is further supported by the politics of reception, which Martens and Niemann (2013) show are rarely correlated with the international data but with national political agendas which they discuss as 'perception' and 'framing' (as discussed in chapter two).

Although Lockheed argues that lower and middle income countries join international assessments 'for others', I would argue that Verger's (2014) argument of more and more countries voluntarily deciding to adopt global educational trends and policies appears to be the case in Lao PDR and Mongolia' participation in LAMP. Lao PDR and Mongolia may potentially have an interest in providing international indicators of their educational systems and skills to others, but none of my interviewees pointed in this direction. What they did make a strong case for is their need to be part of what is happening. Although I would argue may be an internationally induced necessity, but the decision to take part and want to be measured in international assessments appears to be taken from the inside. This contrasts with Chung's (2010) theory that lower and middle income countries are forced into international assessments.

6.1.2 Playing a role in the global shift towards international measurement

In this section I first discuss the perception of the Lao and Mongolian ritual of belonging seen from the centre of calculation, before trying to understand if a similar need to belong to the latest trends in education might also be the case for the UIS.

Having carried out my interviews at UIS before going to Lao PDR and Mongolia, I was not aware of and therefore not in the position to ask my UIS LAMP interviewees questions related to the global ritual of belonging¹⁶⁵. All I could do is go back to my UIS LAMP staff interview transcriptions and search for an indication of my interviewees' awareness of a LAMP being about being part of something bigger. Only one of my centre of calculation interviewees suggested she was aware that, if countries see a programme as up and coming, then it is likely to have an enrolling effect on nearby countries. This is the reason why the centre of calculation was keen to have Vietnam (a growing economy which its neighbouring countries look to) join the LAMP assemblage.

'In Vietnam they told me that if LAMP is successful there, it will give the inertia to start the other countries around them. I was very disappointed with Vietnam stopping, it is an up and coming country in South East Asia, and other countries are looking to Vietnam, if there is an assessment in Vietnam, it opens doors in the region.' UIS#1

Moving away from the ritual of global belonging for LAMP countries, I enquire into a similar rationale for the centre of calculation by asking to what extent the UIS gains from being directly engaged in the latest educational measurement trend. It may be assumed that, like all other actors in the LAMP assemblage, UIS is also piggy-backing its interests.

I suggest that UNESCO cannot afford to 'miss out' on the shift and race towards valid international benchmarks of educational quality for policy, if it is the intention of the Organization to maintain an authoritative position in the future global educational agenda. The WB and the OECD's recent shift to education and their prominence in global educational trends, means UNESCO has to 'keep up' with the latest educational developments (and at the moment, international assessments are recognized as one of the most salient trends in education). As we have seen, the OECD is widely recognized as the 'world ministry of

¹⁶⁵ Since this emerged through my Lao and Mongolian interviews.

education' with uncontested authority, mainly through the development of PISA. I argue that UNESCO cannot afford to step down from playing a crucial role in setting the global educational agenda and its engagement in LAMP is a way of maintaining its expertise-authority in education.

Although the UIS is aware that *'We do not have enough expertise in house' UIS#1*, the Organization decided to join international assessment activities soon after the OECD set out in its international assessment activities (i.e. PISA's first implementation data was released in December 2001, just after the UNESCO HQ meeting in June 2001 when the Organization started discussing the idea of exploring the assessment of literacy skills). Not only is international assessment a measure of educational quality (as opposed to measuring educational access) in line with the Organization's values and mission, but UIS was also keen to introduce innovative approaches into international assessment to deal with culture as a 'non-problem' (see chapter two on 'culture as a problem'). Although LAMP's life has been challenging all along and some key actors have suggested *'killing LAMP'* to focus on other global measurement projects, others are aware that UNESCO cannot afford to not be part of the international assessment trend.

'We cannot kill LAMP, because LAMP is the place where we learn about testing, about assessment, where we build our reputation about someone who knows about our topic. How are we going to talk about student assessment where we do not have any experience? We have the most difficult experience in assessment, that's what we have and we have to protect that thing, LAMP is where we learn and where we get our own legitimacy.' UIS#2

Without LAMP, UNESCO loses its authority to other international organizations investing resources in providing evidence on learning outcomes and quality for educational policy purposes. In the days of 'evidence-based policy', I argue the UIS cannot afford to not be engaged in international assessments. Without the LAMP assemblage spreading across the world, UIS would risk losing its position of Organization *'qualified to tell us what to do'*.

'It was me and ten people, and they said to me, if UNESCO says so, we buy into it, all these other people we don't think they are qualified to tell us what to do, I cannot remember who said those words but everyone was in agreement with that. I suppose it is part of UNESCO

supposedly having impartial technical knowledge, but to me it was like, you know what you are talking about and they don't, but I in fact I did not know that much at that point.' UIS#6

Lower-middle income countries, but also Organizations have interests to forward and gains to achieve by belonging to what is globally valued. This may help explain the number of conflictual black boxes and conflicting interests that the centre of calculation builds LAMP upon.

Finally, I also argue that in the universe of international assessments there is a race to increase the number of participating countries in each international assessment. In the last decade, PISA and PIAAC have acquired such a prominent position in the international assessment universe that it has become challenging for other international assessments like LAMP to justify their existence and maintain a sufficient number of participating countries. This was not the case when LAMP initially developed in 2003 and the Programme stood a chance of creating its own niche of international assessment.

6.1.3 Conclusions

In this section I have discussed how Lao PDR and Mongolia participate in LAMP as a way to be part of 'what is happening' in education globally. I call this a global ritual of belonging which makes being part of a process the main concern, leaving the out-coming numbers a secondary position. The ritual of belonging responds to a need to be put on the map (Grek 2009) and not fall behind in the global competitiveness race. The decision to take part in international assessments represents a route to the recognition from the *greater alliance* and thus becomes a choice of allies in the name of political and economic gains (Steiner-Khamsi and Stolpe 2006). I argue that the focus on the process as opposed to the numbers correlates with the politics of reception in each country, where it is rarely what the numbers say and where they position countries on the rankings that explain the data reception and use.

Finally, I argue that although UNESCO's engagement with LAMP is in line with its shift towards educational quality (as opposed to educational access, measured without direct assessment) and its introduction of 'cultural diversity respect' values into international assessments, the Organization cannot afford to not be part of the most salient recent educational phenomenon which is part of gaining authority in setting the global educational agenda. Finally, I argue that the global ritual of belonging forwards the interests of countries and the UIS.

6.2 The glorifying and scandalizing strategies for LAMP data

In this section I draw on the discussions of governmentality in international assessment literature (seen in chapter two) but also policy borrowing and lending theory (Steiner-Khamsi 2003, seen in chapter two) to further understand what interests are concealed behind Lao PDR and Mongolia's participation in LAMP. I argue that LAMP data, with its 'international' stamp of approval', act as a globally legitimizing tactic in the exercise of power, which I discuss as 'glorifying and scandalizing with LAMP numbers'.

Drawing on the literature discussed in chapter two, I argue that by defining regimes of truth and producing number technologies, LAMP procedures and calculations function as a government strategy to support and justify government agendas and strategies. I argue that these tactics are re-enforced and legitimated by the global nature of LAMP calculations in that it is co-produced by a network of actors, including transnational organizations which are perceived to have authority and expertise. Drawing on Steiner-Khamsi's (2003) study of how international assessments relate to the practice of policy borrowing and lending, I apply her concepts to argue LAMP data is set to support tactics of glorifying and scandalizing.

It seems that there exists three extreme types of policy reactions, which I suggest to label as follows: scandalization (highlighting the weaknesses of one's own educational system as a result of comparison), glorification (highlighting the strengths of one's own educational system as a result of comparison), and indifference. Steiner-Khamsi 2003:2

Firstly, LAMP's conceptual foundations, translated into international assessment methodology can allow for the tactic of glorifying with LAMP data. Glorifying can be a simple process of 'showing a better statistical picture' but even 'statistical eradication' (Steiner-Khamsi 2006¹⁶⁶) of an earlier statistically defined problem, that needs to be 'solved' to allow the government to maintain its legitimacy and rationalize its exercise of power. Secondly, in contradiction with the 'statistical eradication of illiteracy', LAMP can also be used as a tactic of 'scandalizing' through bad results and rankings which can be used to obtain external aid but also to direct attention to or away from governmental areas of concern.

¹⁶⁶ Gita Steiner-Khamsi identified this practice with the statistical eradication of 'the drop outs problem' in Mongolia between 1990 and 2010.

What appears in this discussion is that the technologies of international numbers are powerful instruments which are as strategic as they are potentially 'dangerous'. Although my interviewees point to LAMP as a glorifying instrument, most countries involved in international assessments also worry the power of the numbers may get out of hand. Both my UIS LAMP interviewees and policy actors suggested there is recurring concern at government level: 'what if the numbers portray a picture we do not want to put out to the global world?'

The first section here below on glorifying tactics focuses on the statistical eradication of the literacy problem and shows how the data is understood and produced as part of a pre-established 'better data' tactic.

6.2.1 Lao PDR, the statistical eradication of illiteracy

In this section I pick up the 'better data' discussion from chapter five, to argue that the interests in improving the national literacy rates or even in achieving the statistical eradication of the national 'illiteracy problem', can be used as a strategy of glorifying through internationally approved data.

As a technology of governance, data can be developed and interpreted depending on the scope, the interests or the tactic they are used to support (as seen in chapter two). Data tactics are not a new technology of governance in Lao PDR. Like Mongolia and other socialist states, Lao PDR also declared the country free from illiteracy in 1984 (Soukkongseng 2008). As one of my interviewees suggested, this was only a statistical representation, '*but not in reality*¹⁶⁷'. More recently, Lao PDR has a history of literacy statistics produced with the support of different organizations projecting their own agenda into the data development and interpretation.

'The reason why all the literacy surveys have a different way of measuring literacy is because they are all funded by different organizations serving their interests and not those of the government which needs one single continuous method.' Lao#11 A summary of the different surveys (and the sponsoring agencies and data produced) in Lao PDR over the last period is available in appendix J.

¹⁶⁷ Based on my interviewee's perception of what he sees on the ground when visiting literacy programmes in remote areas of Lao PDR.

In the case of LAMP, we have seen what picture the UIS is trying to project through LAMP¹⁶⁸, but it appears that Lao PDR also has a picture to represent through LAMP data. Although this extract has already been discussed, it makes a strong case for Lao PDR's glorifying use of LAMP.

'We feel we are fighting with the villages, they don't want to study but we have to achieve our literacy goals by 2014 in a hurry. But we need quality too. The only vision here is to eradicate illiteracy, we have no NFE and literacy vision. We will officially declare district by district to have completed Primary NFE by 2014. The President will stand in New York at the United Nations General Assembly and say 'My country has completed NFE and it is 98% literate'.' Lao#10

This statement was confirmed by another high level policy actor, *'2015 is getting close and the prime minister wants Laos to be ready by 2014, to be able to give an account of EFA in Laos at international conferences.'* Lao#12

The latest MOES statistical report states that 134 out of 145 districts and 10 out of 17 provinces are already completed UNFEPEA – the Universal Non-Formal Primary Education For Adults, and the government plans to complete all remaining villages, districts and provinces in 2014 (MOES, 2013: 5). To support this argument, Evans (1998) states that the educational development goals of Lao PDR are actually political goals to legitimize government policy and practice.

The literacy reality on the ground is rather different, as I had the opportunity to see when I was on mission with the Ministry of Education as an official guest to visit the remaining 'illiterate villages'. These villages are reachable with great difficulty (and not reachable at all for months on end during the rainy season) and very few villagers speak Lao¹⁶⁹ (we had local interpreters between Lao and local languages). On the way to the remote villages, in two four-wheel drive jeeps with expert drivers, pulling each other out of rivers and over rocks, we drove past villages of subsistence farmers, who have few reasons to leave their villages and to speak Lao. As we drove past, my Ministry host, nodded with despair and said to me: *'Look around you, look at these villages, look at these people and their lives, and think of the government's ambitious aim...'* He was trying to get me to focus on the divide between the governmental statistical

¹⁶⁸ Greater detail of the literacy challenge at the lower level.

¹⁶⁹ In most village, people speak a local language and in some villages they speak some Vietnamese for trading purposes as they live close to the Vietnamese border.

aims for literacy and the remote Lao realities, and the divide between the valued literacies of the government and the local farmers (i.e. dominant literacies versus vernacular literacies).

Lao PDR no longer wants to be labelled as behind and backward, trailing along, as the stated above by Lao#10 and Lao#12 (*'We want to be ready a year ahead'*).

'We compare because in our development plan it says 'improve through international standards step by step', but I disagree with the 'step by step', it would mean we are always behind, rather than jumping ahead.' Lao#14.

Lao PDR's engagement with LAMP at this crucial stage (in 2014 it will declare a 98% literacy rate) may imply that LAMP will play a role in this government calculation by helping the country jump ahead and portray either a better statistical picture or even an 'illiterate-free Lao PDR'. One of my interviewees stated that *'Statistically, significant progress has been made for literacy. The quantitative reports are likely to be for political purpose showing that social policies are effective.'* Lao#10 Although this diverges from the aims that drove UIS to develop LAMP, we have seen in chapter five in the 'better data' section, that each ally in the LAMP alliance talks the same language, defends the alliance and keeps it alive, in order to piggy-back its own interests and further its own agenda.

Statistics are powerful technologies of governmentality (Lingard 2014), making the statistical eradication of problems a frequently used strategy to rationalize governmental power (and was common in Socialism as we shall see in the section below on Mongolia). As my interviewee suggests, it may be that international statistics may be deployed even more strategically than national statistics.

'The bulk of the work will be local, but you have to place it within the global context for it to matter, unfortunately it's about prestige, and we worked with UNESCO and international organizations, it places the report in context, because without the prestige of UNESCO and international organizations getting together, who are your MOE?, there is no credibility to the MOE to say this, you need the global to make the local matter. LAMP is a trophy for some countries.' UIS#7

From the interview extracts discussed here above it appears that Lao PDR anticipates strategic uses with LAMP data, intending to advance its agenda of 'eliminating the illiteracy problem'

with the aid of transnational institutional processes and internationally stamped statistics. With the process of globally belonging and the glorifying uses of data, Lao PDR is putting itself on the map and jumping ahead.

6.2.2 Mongolia, a history of statistical eradication

In this section I discuss Mongolia's strategies of glorifying with LAMP numbers, relating it to the country's documented history of statistical eradication of problems (illiteracy under Socialism, and school drop outs in recent years). I then discuss how Mongolia also has a story to tell with LAMP, to support the government rationalizing of power.

The problem of school dropouts made a bold appearance in Mongolia with the shift from a planned economy to an open market economy in the early Nineties. The different statistics on dropouts present the problem in differing degrees. Steiner-Khamsi and Stolpe (2006) argue that the data on drop outs are manufactured to suit the Mongolian political agenda (the official Mongolian numbers show how the previous 15 years of reforms have eradicated the problem). The data produced by Organizations like UNICEF (involved in assisting the development of indicators, from the collecting phase until the interpreting phase) produce different numbers of school dropouts to support their out-of-school programmes. The different numbers do not seem to cause concern, as Steiner-Khamsi and Stolpe state that 'It has become common practice among government officials to resort to methodological explanations when discrepancies in official statistics surface' (2006: 182).

The practice of statistical improvement or the statistical eradication of problems was not uncommon in Mongolia when universal education and the eradication of illiteracy were strumentalised in the Mongolian socialist period. Literacy rates were inflated in the 50s and 60s when Mongolia was declared an illiterate free country at the end of its First Five-Year-Plan. The declaration was then revoked after ten years when the government started its 'two culture campaigns' in 1960-61 and 62-1963 to eradicate illiteracy, alcoholism, epidemics and vandalism.

The high level policy actors in Mongolia with whom I talked often made reference to school dropouts as the main source of present day illiteracy. The pictures I was presented with ranged from there still being a serious problem of dropouts to statements of the problem no longer

existing. What follow are two extreme perspectives, of the many my interviewees shared on drop outs.

‘The dropouts are mainly in herder families and it happens at primary school, but I don’t believe the dropout rates because each school receives funding based on the number of enrolled students, so they do not report the ones that drop out, the rate must be about double.’ Mon#17

‘Everything is ok now (referring to dropouts), it was a problem from the Nineties as the herders thought they now had become rich with the privatization of livestock and so they took their kids out, but with the three zuuds¹⁷⁰, they realized that education is safer and that livestock is liable to the climate.’ Mon#22

As documented by Steiner-Khamsi and Stolpe (2006), most of my interviewees also suggested the dropout problem is still an issue, although it has been statistically eradicated in recent years. This goes hand in hand with the ‘literacy issue’, which I was told was no longer a challenge in Mongolia, even though the drop outs have presumably become adults with poor levels of literacy.

‘The government does not ask for help on literacy as we do not have a literacy problem’ Mon#22.

6.2.2.1 The fear of bad numbers

Although Mongolia considers the implementation of LAMP its duty and that there is no literacy problem, its government is not immune to the fear of bad results.

‘With LAMP they will be able to show how education has changed before and after the political change in 1992. At government level there was concern about the results being bad, they want to show off not look bad, they were joking about it saying they could not continue every four years but they were concerned.’ Mon#17

‘If LAMP gives bad results, they were worried, if education level have decreased, it is not good for them, people would say ‘You say we have 98% literacy rates but LAMP shows 70%, but you said we don’t have a problem’ for example. The government was concerned, but I said to them,

¹⁷⁰ Extremely harsh winters conditions in which millions of animals died.

'Mongolia is contributing to international assessment development because of Mongolia's role, I never had to say this to government, but I had to tell them.' Mon#22

Both extracts show that the Mongolian government fears LAMP data and worry about bad results which may not support their political strategies or even be used against the political party in power, providing citizens with instruments to substantiate their dissatisfaction. At the same time as expressing fear, Mongolian policy actors hope that LAMP data will support the government (*'they want to show off'*) and show Mongolian citizens how the change in 1990 was actually not a bad move for education¹⁷¹.

Mongolians are not alone in their fears of LAMP. In discussing the involvement of other LAMP countries, my UIS LAMP interviewees discussed the engagement in LAMP as a political strategy and the fear of bad numbers.

'LAMP in Vietnam was a UNESCO idea, UNESCO driven agenda, the government was not keen on it, Vietnam would rather do a PISA survey, they are now finalizing the instruments, they like to see their productive population, up to 46, anybody above that just lowers rates and increases the sample, they are more into FE than NFE and literacy, they say they have something like 98% literacy rate, we said 'Yes, but it is self-declared' and they said 'OK, but what we need we have, and we don't need anything further than that'. Initially we pushed them to do it, then they said 'OK, as long as you mobilize the funds', we raised quite a few expectations.' UIS#5

'Niger, why do you want LAMP? Because the literacy rates we have are not reliable, and they think LAMP is going to produce new, better results, great, no, it's not about that, they did not know, and they were in the programme for four years, we are going to produce something different, Niger wanted to do LAMP because the literacy rates were very bad, and they were not happy with the way it impacted on how they were ranked in the human development rates, they are probably the worst in the world according to that ranking, and one of the items which explains why they were so low was their literacy rate, so they were discussing it internally how to have better literacy rates and someone came with this idea, they decided LAMP would allow them to produce the rates they needed, but if it were feasible for them, it would be worse for them, because a significant proportion of people who report being literate are not. Vietnam

¹⁷¹ There is widespread nostalgia of how well everything worked under socialism, especially in terms of education and health services.

came with the same thing: ‘We want new literacy rates’, but this is not about literacy rates, that also refers to another institutional problem, the UIS has not clear internally how to talk about literacy rates, we continue to produce literacy rates.’ UIS#2

A similar story is perceived in Lao PDR, as UIS#4 explains the pressure to reach statistical goals.

‘A lot of pressure, because Laos is one of the countries that is going to miss the goal, Mr T¹⁷² has always been interested in literacy, so they have very strong opinion, a lot of pressure to DNFE to generate literacy data, in 2005 they had the census, so they can present that, then there is no data but huge pressure, DFNE has been providing literacy for a long time but it is still a big issue there, the policy makers say we have been providing so why do we still have literacy problem, something missing, not just measurement but the whole subsector – we have to increase the literacy profile, that was the start, when LAMP started people started getting interested.’ UIS#4

The fact that countries take the risk of producing ‘bad numbers’ supports my argument that international numbers are an increasingly indispensable technology of governmentality (Lingard 2014) in educational global policy. Nationally produced numbers, which may be subject to agenda-driven manipulation, are no longer the only data governments rely on to rationalize the exercise of power. International assessments may therefore be implemented to strategically use the numbers for governmentality practices.

Although Mongolia does not have a literacy problem (as stated by my interviewee here above), my interviewees seem to suggest there is fear of LAMP producing bad numbers, which they can use to tell a glorifying or scandalizing story.

‘From 1990 we had a decade of new problems like poverty, school dropouts, low HDI, everything was getting worse so we needed to find a way to increase these numbers, change the bad results, and LAMP meets our needs.’ Mon#17

‘If you do the difference between GDP and HDI, it shows if the country has opportunity to develop and LAMP methodology says Mongolia has higher opportunities to develop, that’s why we are interested.’ Mon#17B

¹⁷² The name of the policy actor has been omitted for confidentiality.

Mongolia, as Lao PDR, has its goals formulated in terms of better numbers (as are the global educational agendas like the EFA goals) and is keen to make international data serve its government interests.

Considering the leverage of international numbers in the days of global educational governance, both Lao PDR and Mongolia are aware that achieving goals through international numbers will put them out there for the global eye and thus be more strategic than achieving goals with national statistics. Based on this argument, it may be that the concept of governmentality may need be furthered to grasp the power of 'the international' in the days of international assessments and global educational governance. The ensemble of 'institutions, procedures, analysis and reflections, calculations and tactics' (Foucault 1991: 102) in the rationalizing of government power do not have sufficient authority unless they are embedded within global educational trends.

I argue that national educational policy and practice gain little legitimacy if they are not embedded in global educational trends. Intervention, knowledge, regimes of representation, the delineation of concepts, arguments, policy problems and solutions (Lemke 2007), are now rationalized and 'stamped' as legitimate by being embedded in what is 'happening globally'. In other words, for governments to rationalize the exercise of power in the era of global educational policy, their tactics and strategies need to be embedded within global educational trends by entering a space of shared governance with transnational organizations.

6.2.3 Scandalizing with numbers

In this section I discuss the use of 'scandalizing with numbers' of international assessments as a political tactic, which countries project into LAMP (this does not exclude 'glorifying with numbers' at the same time). This brief section discusses how data is used to portray a 'bad statistical reality' which can further the government agenda, according to how the number reality is formulated and justified.

The truth regimes created by international assessments (Hamilton 2001) portray literacy in ways that can feed into glorifying but also scandalizing strategies. The internationally approved numbers, which are comparatively negative for most countries (approximately half the participating countries score under average, and those scoring average results tend to be discontent for not being in the top five or ten countries) have a negative effect on levels of

national self-esteem. Although a burden for governments, bad numbers and rankings can be strategically turned to a country's advantage. Once again the numbers become a government tactic to support and justify its governance activities and authority.

Although there is fear of bad numbers and rankings in Lao PDR and Mongolia (direct measurement is conventionally associated with higher levels of illiteracy or poor literacy and thus rarely make the literacy picture look 'better'), my interviewees have already anticipated the tactics for which the foreseen 'bad' data can be used. This is a tactic of scandalization.

In the case of Lao PDR, although the country intends to eradicate literacy by 2014, the awareness that LAMP data may portray a bad picture will be used to gain access to financial resources.

'We have to ask ourselves 'Are we, the department of NFE, strong enough to fight for NFE?' I don't mean at raising our voice but at showing evidence. LAMP will be our evidence.' Lao#10

'We have to adapt our policies to other countries, to get funds. We also need data and evidence to get funds.' Lao#14

Although Lao PDR has carried out multiple surveys on the state of literacy in Lao PDR in the last decade, it might be that the comparative nature of LAMP data is considered more strategic to gain aid from agencies or donor countries concerned with adult literacy. What Lao#14 adds is that in order to get access to funds, the government has to show it adopts a similar approach. It may be that 'adapting our policies to other countries' means adopting the same hypernarratives (Stronarch 2010) and language of educational reform (Steiner-Khamsi and Stolpe 2006) or implementing the same programmes and educational trends, without actually putting such policies into practice. This extract supports the global ritual of belonging rationale. Countries simply adapting to what is valued by the larger community and adopting the same trends, in this case to gain economic resources.

Given the different literacy challenges and stages of development in Lao PDR and Mongolia, it is not surprising that Mongolia's 'scandalizing with numbers' will not be used to access financial aid but to as a specific political strategy, as we have seen in the section above.

'With LAMP they will be able to show how education has changed before and after the political change in 1992.' Mon#17

'I think this government will use LAMP for the next elections saying 'They said education and literacy were like this, but look, LAMP shows this, we are now bringing change', they will use it in a political way.' Mon#22

Interviewee Mon#22 suggests that LAMP will be used to prove that the previous government (the one that chose to implement LAMP) lied about the educational state of the system, and use the international numbers as a benchmark to show *they* will now bring change. This implies that in order to gain political support, Mongolia needs bad data to scandalize (whether the data is negative or not they may project negative interpretations into the data), upon which the government will be able to glorify by showing change and progress since the LAMP results.

Mong#22 added that the newly elected government (in 2012) is likely to profit from the previous government's choice to join LAMP: *'If the results are bad they will be able to say that things got worse with the previous government.'* Mon#22

Once again, the tactics of scandalizing with numbers to access greater political support or external aid, are strengthened by the fact that the data, however 'bad' it is, is international, comparative, and stamped by an authoritative organization whose alliance the country is part of.

6.2.4 Conclusions

In this section I have discussed how LAMP can be used to feed into the government procedures and tactics to exercise power, or in this particular case, the government's delineation of the literacy problem and justification for action (or no action). This leads me to discuss how both Lao PDR and Mongolia draw on the 'better data' claim to draw a picture through LAMP which either directly or indirectly relates to statistically eliminating the literacy problem, but also scandalizing with LAMP data to justify increased financial aid or political support. I argue that these contradictory agendas are piggy-backed through LAMP's assemblage.

I thus argue that in the days of global education governance, governmentality education strategies increasingly rely on countries participating in global trends to legitimize power. LAMP data as an international technology of governance grants LAMP countries greater authority in the exercise of power by being part and on the map of what is globally valued and

‘what is happening and where others are going’. Embedding discourse, practice and change in global educational trends such as international assessments has a greater effect on strategies to legitimize power.

Relating the strategies LAMP has been set to, it appears that LAMP enters the governing process (Fenwick et al. 2014) not by directly informing policy with statistical evidence, but through the comparative knowledge the Programme produces in order to justify frameworks of interpretation, and change of policy and practice. The strategic uses that Lao PDR and Mongolia project into LAMP relate to Verger’s (2013) skeptical rationales for joining global educational trends, which imply an instrumental use of international assessments.

6.3 Opportunistic, personal reasons and resources

In this section I briefly discuss unaccountable elements which often complement the rationales for joining international assessments. Although complex rationales construct the picture of why lower-middle income countries join international, I argue that less ethical reasons may contribute to countries’ initial *interessement* and *engagement* in the Programme.

Researching and having access to such information poses ethical challenges which require either omitting the information entirely or not using any direct interview extracts. This explains why I only acknowledge this dimension in international assessments (to give a more complete picture of the rationales), without going beyond the limits of what is ethical. It must be stated that this information is a collection of stories that draw on all countries participating in LAMP.

The reasons which emerged to have aided the decision to join LAMP may be grouped together as opportunistic and personal (i.e. of individuals involved) and include motives such as: personal career development and capacity building, personal connections and networking, family reasons, job creation, and personal interests among others.

Although these are reasons which have actually played a crucial role in the involvement of countries in LAMP, I argue that they play an important role during the ‘decision’ moment when countries decide to engage with LAMP and formalize the *problematization* and *interessement* stages in the MoU. I would argue that these rationales are not sufficient to complete the *enrolment* of countries considering the risks associated with international numbers, but that

they complement the need to be put on the map, compare and measure gaps with reference societies and strategically use international data for governmentality.

6.4 Conclusions to LAMP's unstated uses

In this chapter I have discussed how the LAMP assemblage, enacted by its human and non-human actors, furthers the interests of Lao PDR, Mongolia and the centre of calculation that LAMP does not claim.

In chapter six I have drawn on the concepts of *multiple* and *competing web of alliances* and the *greater alliance* to unpack the participation of Lao PDR and Mongolia in multiple international assessments and the drawn-out participation of both countries (ten years in Mongolia and more than four years in Lao PDR without getting data). What emerges in my data discussion is that belonging to the LAMP assemblage appeared to have greater importance than the actual numbers being produced, the methodologies being used, and skills being assessed.

Belonging to the LAMP assemblage appeared to correlate with the desperate need to be part because '*we no longer stand alone*' in Lao PDR, and Mongolia's desperate need to achieve international standards in education. I argue that these needs make a strong case for international assessments as a global ritual of belonging, which countries value as a way to not fall behind and be labelled. The global ritual of belonging 'shares out' the pressure of the competitive global economic race to stay afloat. Being part of the trend of international assessments and speaking the language of the valued community constitutes a way of being put on the map (Grek 2009) and *not catching up step by step, but jumping ahead* (as stated by one of my Lao interviewees). I argue that the same can be said for the UNESCO Institute for Statistics, which needs to be part of the trend of international indicators of learning measurement in today's shift towards policy as numbers, in order to maintain its authoritative position in setting the global education agenda.

I also argue in this chapter that Lao PDR and Mongolia weave the prospective international numbers derived by international assessments into their practices of rationalization of power. This is done by using the international numbers to glorify and scandalize, as the international nature of the data gives greater power to governmentality strategies. Improving the literacy picture or eliminating it with statistics (glorifying) is not a new practice in Lao PDR and Mongolia (mainly during their socialist periods). Bad numbers and bad rankings (scandalizing)

are used both as a means to attract external aid (in Lao PDR) but also to gain statistical support (in Mongolia).

Drawing on Luhmann's externalization theory (1997) and Schriewer's 'externalization to world situations' (1988), it could be suggested that referencing international assessment numbers and processes is a form of externalization to what is valued outside the Lao and Mongolian educational subsystem and then processed within, as a strategy of legitimization.

In this chapter I have also suggested that the rationales to join international assessments are often complemented by reasons beyond the explored areas in chapters five and six, that are strictly personal and opportunistic. Given the ethical challenges such information creates, I have discussed this briefly, stating that those involved in the international assessments can have personal reasons that induce them to 'push' for the implementation of the Programme, during the early stages of *interessement*.

Based on the findings which emerge in chapter six, I argue for a governmentality reconceptualization that responds to the international and comparative character of today's educational governance. I argue that for governmentality strategies to be effective in the days of global education policy, governments and organizations rely on embedding their practices and policies in the global educational trends. The rationalization of power would be weakened without the international dimension of educational practices and policies, thus requiring reconceptualization of conceptual tools of analysis.

In this chapter I draw out the main contributions this thesis makes to knowledge and some of the implications this knowledge has for practice and policy. By researching what drives lower-middle income countries to join international assessments through an Actor-Network Theory lens, I have made conceptual contributions to Actor-Network Theory and contextualised my research findings within the emerging field of International Assessment Studies. In this chapter I discuss the main findings of this study, which uncover a complex picture of rationales for participation in international assessments, that go beyond the public narrative of measuring learning and policy as numbers. These contributions are then discussed in relation to relevant scholarly research, and in terms of their implications for policy and practice. I conclude the chapter by suggesting areas worthy of further exploration which have emerged through this study.

7.1 A contribution to Actor-Network Theory

I begin this conclusion by describing the conceptual contributions I have made to Actor-Network Theory.

As discussed in chapter four, the application of Actor-Network Theory to my research has proved a valuable analytical framework of analysis. I have drawn on ANT concepts to deepen the understanding of the process of participation in LAMP, whilst recognizing that ANT's material semiotics (Law 2008) have not provided sufficient conceptual tools required for the questions arising in the analysis of my data. I have thus tried to contribute to ANT by suggesting concepts which have proved helpful for the purpose of this research. The concepts which have emerged and proved useful are the *language of convergence*, the *web of multiple alliances*, and the *greater alliance*.

ANT supports the theory that alliances speak a common language which loosely represents the multiple, even contradictory, interests of all actors. Together with the concept of *convergence* put forward by Callon (1991) and based on my application of ANT to understanding the use of key LAMP narratives (i.e. better data), I argue that allies use a *language of convergence* which allows them to communicate and perform their assemblage-adapted identities without having to face the fact that they are actually piggy-backing different, conflictual interests through the same assemblage. In practice allies go their own way, though at talk level all allies unite

through a *language of convergence*. This concept relates to Steiner-Khamsi and Stolpe's (2006) idea of 'speaking the new language of the allies' (2006: 147) and Stronach's (2010) concept of hypernarratives – in both cases policy actors come together and speak the same language at policy talk level, whilst each actor fills the language with their own meaning in practice. Through the application of the *language of convergence*, I have argued that LAMP allies come together to join forces, whilst furthering conflictual interests.

ANT states that during the *interessement* moment of translation (Callon 1986), the obligatory passage point weakens its potential allies' connections with other alliances. Although the process of *interessement* implies alliances are formed and fended for, the application of ANT to the LAMP alliance and Lao PDR and Mongolia's engagement with a number of regional and international assessments, make the case for a concept which I called a *web of multiple alliances*. This concept implies that in the case of international assessments, multiple alliances can exist and go as far as re-enforcing the need to be part of other international assessment alliances. I am not arguing that assemblages do go through the process of weakening threatening alliances which may subtract valuable allies (a *web of competing alliances*), but that there are instances of the *competing alliances* representing a form of support to each alliance's existence. This may be the case of alliances that have similar functions and serve similar interests. This concept helps visualize the existence of the multiple threatening and/or supporting alliances as a series of alliances populating the same social space.

The concept of *web of multiple alliances* leads to the concept of the *greater alliance*, which I introduced to ANT in the search of an understating of the final aims of countries joining one or multiple international assessment alliances. Based on the 'global ritual of belonging' finding, I have argued that allies' participation is driven by the need to take part in multiple alliances as a process of getting closer and being 'recognized' by the larger valued community. The valued community, often constituted by successful economies and reference societies, can be represented as a greater alliance at the centre of the *web of multiple alliances*. Gaining recognition by and closeness to the greater alliance acts as a form of soft power (as discussed by Wiseman 2013) of legitimization for countries competing to be 'put on the map' and unlabeled as backward.

Lastly, I drew on ANT to enquire into the *why* question, (which ANT critiques suggest is a weakness of the methodology). I have found ANT to provide useful theoretical instruments

which go beyond understanding the how, with Latour's 1987 concept of *piggy-backing* and assembling success and durability. Together with the introduction of the *greater alliance* concept, I argue that these concepts provide theoretical tools to answer and better understand the why question, and in this specific case, why lower-middle income countries participate in LAMP.

7.2 Identifying the emergence of International Assessment Studies

In this thesis I have argued that the extensive and rapidly developing scholarly literature, growing out of multiple research traditions, is forming a new field of enquiry which I call International Assessment Studies (IAS). I have located my thesis, and its contribution within this new field of enquiry. The field of International Assessment Studies (IAS) emerges as a response to a significant moment in history which sees international assessments playing a central role in all aspects of education.

7.3 Lower-middle income countries' rationales for joining international assessments

The case studies presented in the thesis of LAMP in Lao PDR and Mongolia provided in-depth enquiry into the rationales for lower-middle income countries joining international educational assessments.

The dominant narrative behind the development of international assessments is Rose's (1991) concept of 'policy as numbers' – the reliance on data to inform policy. Based on this understanding, I have discussed the concept of 'literacy as numbers' interpreted as the reliance on the messiness and plurality of multiple literacies and literacy practices being turned into an internationally comparable, objective facts that can define and inform educational policy processes. Hence the assumption underlying my research on rationales for joining international assessments, is that lower-middle income countries were joining as a need for data to inform educational policy processes. The fact that Lao PDR and Mongolia already have detailed information and statistics on the national literacy needs¹⁷³, made me assume that both countries gave greater value to international data for policy.

¹⁷³ Mongolia has the name of every illiterate or poorly literate person in the country and Lao PDR has recently carried out a national assessment of literacy levels together with UNESCO and UNICEF.

In chapter five I discussed how LAMP's main non-human allies make a strong case for LAMP's data to be part of the policy process, although its working documents and human actors do not align with this approach. I then question my UIS LAMP interviewees as lightly engaged with LAMP's policy claim, which drawing on one of my interviewee's statements, I have called a 'fairy tale approach' to policy. I suggest this fairy tale approach has been transferred to my Lao and Mongolian interviewees, who made statements suggesting literacy as numbers in Lao PDR and Mongolia does not appear to play a central role in the rationales for participation in LAMP.

A distinction must be made between Lao PDR and Mongolia as regards this light engagement with LAMP for policy. Although interviewees in both countries can be described as engaging lightly, my Mongolian interviewees expressed policy-related rationales that went beyond the policy as numbers approach to rationales of policy borrowing. In other words, my Lao interviewees stated very little in relation to LAMP data for policy, whereas my Mongolian interviewees suggested the need to understand what policies allow the achievement of good international assessment rankings. This light engagement with LAMP for policy implies that there are other reasons driving the interest of lower-middle income countries to join international assessments.

In order to unpack the rationales of Lao PDR and Mongolia's participation in LAMP, I enquired into LAMP's 'valuing local diversity' claim.

Although LAMP's methods and instruments assess literacy in a standardized manner in contrast with LAMP's purpose to value local diversity, this tension appears to conceal the multiple interests furthered by the LAMP assemblage. From my interviews, it appears that Lao PDR and Mongolia value and accept LAMP's respect for local diversity, but give greater value to standardization for comparative purposes. Interviewees in both Lao PDR and Mongolia insisted on the need to benchmark themselves against their reference societies justified by a concern to catch up and compete. This supports Darville's (2000) argument that international assessments measure literacy for competitiveness rather than the multiple literacies used in individuals' everyday lives. I assume that the pilot status of LAMP as an experimental programme is a strategic choice of Lao PDR and Mongolia, who can justify bad rankings and results on the methodological attempts to account for diversity.

It must be added that Mongolia's need to not compare with other LAMP countries represents a paradox. Although Mongolia is keen to measure itself internationally, it has accepted to do it with LAMP, a smaller alliance, but firmly tries to avoid all comparisons with LAMP countries. At the time of Mongolia's formal agreement to join LAMP, PISA had not yet become such a global phenomenon nor had it become such a prestigious alliance in the universe of international assessments. It is significant that as PISA now expands to lower and middle income countries, Mongolia is interested in joining, as a more direct route to the *greater alliance* it values and would prefer to compare itself with.

This need to not be seen as behind and be compete with reference societies through the implementation of LAMP, relates to the 'global ritual of belonging' which emerges through an ANT analysis of my interviewees' perspectives on the rationales for participation. Being part of LAMP and other international assessments is a way of being part of the global community or getting closer to each country's valued larger community (which I have named *the greater alliance* in ANT terms). With the 'global ritual of belonging' I argue that there is a need in lower-middle income countries to do whatever is the global educational trend of the moment in order to be part of or accepted by the valued community. This resonates with Grek's (2009) argument that participation is a way of being 'put on the map', particularly felt in both Lao PDR and Mongolia (the former still classified as a Least Developed Country and the latter a very recently booming economy) as both countries try to move away from being labelled as backward. The ritual of global belonging also relates to Kamen's argument that countries gain a good reputation for pursuing modern values and prestige from benchmarking (or adopting processes with the intention to benchmark) themselves against the OECD rich club of countries (2013).

The need to be part of whatever is 'happening' globally has led me question what countries gain from the global ritual of belonging. Steiner-Khamsi has argued that through the process of policy borrowing and the adoption of an international language of reform (which mainly occur at policy talk level and is then localized in practice), countries gain political and economic alliances. Drawing on Schriewer's concept of externalization, Steiner-Khmasi (2010) also argues that through policy borrowing countries can legitimize or even limit conflict around policy reforms. Rose argues numbers are used in the same way to reduce conflict, thus supporting Wiseman's (2013) argument that international assessments are a form of soft power in the

global community which provides legitimacy and credibility. Drawing on the arguments put forward by Steiner-Khamsi, Rose and Wiseman, the global ritual of belonging may be acting in a similar manner by providing lower-middle income countries with political and economic alliances, legitimization, credibility, and limited conflict around policy and practice.

I have also suggested that the UIS benefits from this global ritual of belonging. With the rise of the World Bank and the OECD's position in setting the future global agenda for education, and the prominent role acquired by the international assessments they support and administer (respectively), the UNESCO Institute for Statistics finds itself competing to maintain an authoritative position among those shaping the future education agenda. Although LAMP's life has been challenging all along and some key actors have suggested '*killing LAMP*' to focus on other global measurement projects, other key actors are aware that UNESCO cannot afford to not be part of the international assessment trend, and its engagement in LAMP is a way of maintaining its expertise-authority in education. In the days of evidence-based policy and access plus learning goals, I argue the UIS cannot afford to not be engaged in international assessments and, in a similar way to Lao PDR and Mongolia, it gains from globally belonging to the trend of the moment.

Beyond the focus on the process of participation in international assessment, an analysis of my data suggests that Lao PDR and Mongolia project strategies into the international data LAMP generates, which complement their rationales for participation. As seen in chapter five, all the actors joining the LAMP assemblage have converged whilst sustaining different interests (in many cases conflicting interests), through LAMP's *language of convergence* identified in the Programme's 'better data' claim. I argue that both Lao PDR and Mongolia have identified strategies to both glorify and scandalize (Steiner-Khamsi 2003) with LAMP data. In order to understand the uses projected into LAMP, I have unpacked the multiple meanings projected into 'better data'.

LAMP's promise of better data (in terms of valid data capable of highlighting the problem of poor literacy skills at the lower end of the literacy continuum) has at times been interpreted by LAMP countries as a way of statistically eliminating their illiteracy problem by generating literacy rates (based on a dichotomy of literates/illiterates) from the LAMP literacy levels. This is not entirely a misunderstanding since international assessments provide statistics which go from poorly literate to proficiently literate, thus excluding the concept of illiteracy. Whether

countries intend to eliminate illiteracy, or simply paint a better picture, international data appears to provide the means for this glorifying strategy. In the case of Lao PDR, LAMP may be supporting the country's need to achieve its goals set in literacy statistics, and in Mongolia, LAMP will paint a picture that the government is more willing to put out there for 'the global eye'.

Further to glorifying with internationally approved data, countries use the data 'scandalize'. This is based on an expectation that direct testing will generate bad numbers and that the data will comparatively produce poor rankings. In Lao PDR my interviewees suggested that the evidence of poorer levels of literacy would allow them to access greater foreign aid. In Mongolia, my interviewees suggested the expected bad results and rankings would serve political purposes in gaining voters' support and reform legitimacy.

Considering the leverage of international numbers in the days of global educational governance, both Lao PDR and Mongolia appear keen on international numbers (as opposed to national data) to enact their governmentality strategies, whilst also putting themselves 'out there' for the global eye. Based on this need for and acceptance of international data, it may be that the governmentality concept may need be furthered to grasp the power of 'the international' in the days of international assessments and global educational governance. The ensemble of 'institutions, procedures, analysis and reflections, calculations and tactics' (Foucault 1991: 102) in the rationalizing of government power no longer have sufficient authority. On the basis of this 'global age' governmentality reconceptualization, I argue that national educational policy and practice gain little legitimacy if they are not embedded in global educational trends. Intervention, knowledge, regimes of representation, the delineation of concepts, arguments, policy problems and solutions (Lemke 2007) are now rationalized and 'stamped' as legitimate by being embedded in what is 'happening' globally. In other words, for governments to rationalize the exercise of power in the era of global educational policy, their tactics and strategies need to be embedded within global educational trends (i.e. international assessments) by entering a space of shared governance.

The above mentioned rationales, closely interwoven, appear to have driven Lao PDR and Mongolia to join LAMP. These rationales may not represent the complete picture. As I have discussed, there are other rationales such as opportunistic and personal reasons which complement the choice to participate in LAMP. Furthermore, although my interviewees' did

not give importance to the funding used to implement LAMP, it cannot be denied that this funding¹⁷⁴ was also entered the rationales for participation.

It must be added that these are not the only reasons that drive Lao PDR and Mongolia to join, but that they are complemented by other rationales that my interviewees decided to give less relevance to. However, the rationales drawn out in this chapter do represent the main concerns my interviewees had reason to value and share.

7.4 Implications for policy and practice

The strictly standardized instruments and processes of international assessments and their worldwide growth, are widely accompanied by a fear of uniformity and convergence at policy and practice levels¹⁷⁵. My research findings indicate that the complex rationales for participation in international assessments may not be leading towards educational convergence as argued by World Culture Theorists (as discussed in chapter two). The implementations driven by the rationales I have identified here above may act in a similar way to ‘speaking the language of political and economic allies’ identified by Steiner-Khamsi and Stolpe (2006). This means that although countries are implementing standardizing assessment programmes, which have created a horse race mentality around the rankings (Kamens 2013) and are accompanied by pressure to teach to the test in order to perform better, the different rationales of each country participating may explain the different levels of convergence and/or localization which such programmes bring about. Ironically therefore, one of the most standardized phenomena in education is still liable to localization. A country which is participating to be part of whatever is the ‘thing’ to be doing in education, rather than on the basis of aligned understandings, is likely to implement such programmes to benefit from the advantages of globally belonging but also likely to use the data and the process of participation for purposes that are not aligned with the programme aims (i.e. inform educational policy reforms towards international assessment derived recommendations).

¹⁷⁴ In the case of Lao PDR, the government had Fast Track Initiative funding it had to use for evaluation and monitoring, whereas Mongolia was supplied funding by the UNESCO Literacy Decade fund.

¹⁷⁵ A good example of this is the letter signed by tens of scholars, addressed to the OECD and published on the Guardian in May 2014. <http://www.theguardian.com/education/2014/may/06/oecd-pisa-tests-damaging-education-academics>

This argument thus supports a Culturalist approach (Spring 2009) by concluding that lower-middle income countries are strategically making use of what is globally valued to further their domestic interests and agendas, thus making global trends local in practice.

Going beyond the Culturalist and World Culture Theory divide, and on the basis of the different interests driving Lao PDR and Mongolia to participate in LAMP, it might be that the different rationales for participation explain differing levels of convergence or localization, that can potentially co-exist. In the case of Lao PDR and Mongolia, there is convergence at programme level and policy talk level, though the programmes serve local interests which go as far as conflicting with the aims of such programmes, thus making responses to such programmes localized in practice. Although a deeper understanding of these dynamics can be acquired from the national responses of Lao PDR and Mongolia, this cannot lead to globalized policy assumptions. The levels of convergence and localization as an effect of such programmes in different countries are likely to depend on multiple factors (including the intention and/or attempts to globalize or not, economic and political alliances, national politics of education, etc.) and are liable to change over time in the same national setting.

Finally, the thesis suggested that an ANT analysis of validity as a ‘rationalizing’ feature assembled through pragmatic interests and power may reveal insights into the construction of data and its acceptance. This novel finding suggests new avenues for research, and further supports recent revisionist approaches toward studies of validity in assessment (Zumbo 2009, Addey 2014).

The conclusions I discuss here above have implications for the development of international assessment programmes aiming to provide for lower-middle income countries, like PISA for Development. In the case of Lao PDR and Mongolia, although both countries valued the cultural diversity respect aspect of LAMP, their interest was in the Programme’s ability to compare and measure their skills on a global scale. Together with Lao PDR and Mongolia’s light interest in LAMP data for policy, this may have implications for the criteria and aims of the development of PISA for lower and middle income countries. PISA for Development’s intention to adapt to local context to allow for greater policy value of the data may in fact be valuable for some countries but less for other countries attempting to globalize through such programmes. This implies that countries may be willing to participate whether or not international assessment data will provide greater policy value. This does not imply that testing

agencies may not want to strive towards improving the conceptual and methodological ability of the programmes to internationally compare whilst recognizing diversity, but it may imply that it is not the programmes as much as the countries rationales for participation that has an impact on the uses made of international data.

7.5 Areas for further scholarly exploration

The emerging field of International Assessment Studies calls for literature reviews to further develop the field of enquiry, and to discuss and elaborate further the subareas identified in this thesis. Such scholarly reviews would also identify literature review gaps in IAS, thus setting research priorities both for a deeper understanding of the process but also for administering agencies and final data users.

The rationales for participation in international assessment are likely to be different in other lower and middle income countries (i.e. the sub-Saharan countries new to international assessments and keen to join PISA for Development). Further empirical research on the rationales of participation in both lower, middle and high income countries might support this study's findings or generate further complexity to complement the findings emerging in this thesis.

References

Abdul-Hamid, H., K. Abu-Lebdeh, et al. (2011). *Assessment Testing Can Be Used to Inform Policy Decisions*. Washington DC, World Bank.

Achieve (2007). *Creating a World-Class Education System in Ohio*. Columbus, Ohio Department of Education.

ADB (2003). *Education. Our Framework: Policies and Strategies*. Manila, ADB.

Addey, C. (2014). *Better data: a language of convergence for assembled validity in international assessments*. International Testing Commission conference. San Sebastian. July 2014.

Aggarwala, N., Ed. (2004). *Quality Assessment of Primary and Middle Education in Mathematics and Science (TIMSS)*. Takoma Park, MD, Eaton-Batson International.

Amoako, E. (2012). "Globalisation plus comparative and international education: towards a theory of convergence." *Journal of International and Comparative Education* 1(1): 61 -70.

Anderson-Levitt, K. M. (2003). *Local Meanings, Global Schooling: Anthropology and World Culture Theory*. New York, Palgrave MacMillan.

Appadurai, A. (1996). *Modernity At Large: Cultural Dimensions of Globalization*. University of Minnesota Press.

Apple, M. W., J. Kenway, et al. (2005). *Globalizing Education - Policies, Pedagogies and Politics*. New York, Peter Lang Publishing.

Arffman, I. (2010). *Developing Translation Procedures in International Reading Literacy Assessments: Translators' View*. European Educational Research Association, Berlin.

Arksey, H. and P. Knight (1999). *Interviewing for Social Scientists: An Introductory Resource with Examples*. London, Sage.

Atkinson, T. (2013). *Psychometrics and neoliberal literate conduct. Literacy as Numbers*. International Symposium. London, IOE.

Baker, D. P. and G. K. Le Tendre (2005). National differences, global similarities: World culture and the future of schooling. Stanford, Stanford University Press.

Ball, S. (1990). Politics and policy making in education: explorations of policy sociology. London, Routledge.

Ball, S. (1994). Education Reform: A critical and post-structuralist approach. Buckingham, UK, Open University Press.

Ball, S. (2006). Education policy and social class: the selected works of Stephen J. Ball. London, Routledge.

Ball, S. (2012). Global Education Inc. Oxon, Routledge.

Barnett, M. and M. Finnemore (2004). Rues for the World, International Organizations in Global Politics. Cornell, Cornell University Press.

Barton, D. (1994). Literacy: An Introduction to the Ecology of Written Language. Oxford, Blackwell.

Barton, D., M. Hamilton, et al. (2000). Situated literacies: reading and writing in context. London and New York, Routledge.

Beck, U. (2006). The Cosmopolitan Vision. Cambridge UK/Malden MA, Polity Press.

Bennett, J. (2005). "The Agency of Assemblages and the North American Blackout." Public Culture 17(3): 445-465.

Blum, A., H. Goldstein, et al. (2001). "International Adult Literacy Survey (IALS): an analysis of international comparisons of adult literacy." Assessment in Education 8(2): 225–246.

Bobrow, D. B. (2006). Policy Design: Ubiquitous, Necessary and Difficult. Handbook of Public Policy. G. Peters and J. Pierre. London, Sage.

Boudard, E. and S. Jones (2003). "The IALS approach to defining and measuring literacy skills." International Journal of Educational Research 9(3): 191 – 204.

Bounkhong, S. (2002). *Pathet Lao nai sangkhom nana sat* (Translation: Lao in the international community). Vientiane, Privately published.

Bourdieu, P. (1998). *Acts of Resistance Against the New Myths of our Time*. Cambridge, Polity Press.

Bourdieu, P. (1999). *Practical Reason: on the theory of action*. Cambridge, Polity Press.

Bourdieu, P. (2003). *Firing back against the tyranny of the market*. London, Verso.

Bracey, G. W. (2008). "The Leaning (Toppling?) Tower of PISA?" *Principal Leadership* 9(2): 49 - 51.

Bradburn, N. and D. Gilford, Eds. (1990). *A Framework and Principles for International Comparative Studies in Education*. Washington, DC, National Academy Press.

Broadfoot, P. (2000). "Comparative Education for the 21st Century." *Comparative Education* 36(3): 333 - 342.

Brown, P., H. Lauder, et al. (2011). *The Global Auction: the broken promises of education, jobs and income*. Oxford, Oxford University Press.

Bruun, O. and O. Odgaard (1996). *Mongolia in Transition: Old Patterns, New Challenges*. London, Routledge.

Buckingham, B. R., W. A. McCall, et al. (1921). "Report of the Standardization Committee." *Journal of Educational Research* 4(1): 78-80.

Burbules, N. C. and C. A. Torres (2000). *Globalization and Education: Critical Perspectives*, Routledge.

Burrell, G. and G. Morgan (1979). *Sociological Paradigms and Organizational Analysis*. London, Heinemann Educational.

Callon, M. (1991). Techno-economic networks and irreversibility. In 'A Sociology of Monsters: Essays on Power, Technology, and Domination' edited by J. Law. London, Routledge.

Callon, M. (1986). Some elements of a sociology of translation: Domestication of the scallops and the fishermen in St Brieuc Bay. *Power, Action, and Belief: A New Sociology of Knowledge?* J. Law, Routledge and Kegan Paul.

Callon, M. and B. Latour (1981). Unscrewing the Big Leviathan: How Actors Macro-Structure Reality and How Sociologists Help them Do So. *Advances in Social Theory and Methodology: Toward an Integration of Micro and Macro Sociologies*. K. Knorr and A. Cicourel. London, Routledge.

Castells, M. (2000). "Materials for an exploratory theory of the network society". *The British Journal of Sociology* 51(1): 5-24.

Chambon, A. S. and A. Irving (1999). *Reading Foucault for social work*. New York, Columbia University Press.

Chung, J. H. (2010). Finland, PISA, and the Implications of International Achievement Studies on Education Policy. *The Impact of International Achievement Studies on National Education Policymaking*. A. W. Wiseman. Bingley, UK, Emerald Group Publishing, Ltd. 13: 267 - 294.

Cincotta-Segi, A. (2011). "Talking in, talking around and talking about the L2: three literacy teaching responses to L2 medium of instruction in the Lao PDR." *Compare: A Journal of Comparative and International Education* **41**(2): 195-209.

Clarke, J. and J. Newman (1997). *The Managerial State: Power, Politics and Ideology in the remaking of Social Welfare*, Sage.

Cohen, L., L. Manion, et al. (2013). *Research Methods in Education*. Hoboken, Taylor and Francis.

Cussò, R. (2006). "Restructuring UNESCO's statistical services - The "sad story" of UNESCO's education statistics: 4 years later." *International Journal of Educational Development* 26: 532–544.

Cussò, R. and S. D'Amico (2005). "From development comparatism to globalization comparativism: towards more normative international education statistics." *Comparative Education* **41**(2): 199-216.

Dale, R. (1999). "Specifying globalization effects on national policy: a focus on the mechanisms." *Journal of Education Policy* **14**(1): 1-17.

Darville, R. (1999). "Knowledges of Adult Literacy: Surveying for Competitiveness." *International Journal of Educational Development* **19**: 273-285.

Darville, R. (2001). *Adult Literacy as Social Relations: A Democratic Theorizing*. CASAE-ACÉÉA National Conference 2001 - Twentieth Anniversary Proceedings.

David, B. and W. Alexandre (2005). *Global Trends in Educational Policy*. London, Elsevier.

Deacon, B. (2007). *Global Social Policy and Governance*. London, Sage.

Dolowitz, D. and D. Marsh (1996). "Who Learns What from Whom: a Review of the Policy Transfer Literature." *Political Studies* **44**(2): 343-357.

Easton, M. (1953). *The Political System*. New York, Knopf.

Elley, W. (2002). *Evaluating the Impact of TIMSS-R (1999) in Low and Middle income Countries: an independent report on the value of World Bank support for an international survey of achievement in mathematics and science*. Amsterdam, International Association for the Evaluation of Educational Achievement.

Ellis, C. (2007). "Telling Secrets, Revealing Lives: Relational Ethics in Research With Intimate Others." *Qualitative Inquiry* **13**(3): 3 - 29.

Ercikan, K. (1998). "Translation effects in international assessments." *International Journal of Educational Research* **29** (Chapter 4).

Evans, J. (2013). *Interpreting International Surveys of Adult Skills: Methodological and policy viewpoints*. International symposium 'Literacy as Numbers'. Institute of Education, London. June 2013.

Faik, I., M. Thompson, et al. (2011). Flattening the development landscape. 'Understanding Development through Actor-Network Theory' International Seminar. LSE, London.

Fenwick, T. and R. Edwards (2010). Actor-Network Theory in Education. London, Routledge.

Fenwick, T. and R. Edwards (2014). Network Alliances. Governing Knowledge. Comparison, Knowledge-Based Technologies, and Expertise in the Regulation of Education. T. Fenwick, E. Mangez and J. Ozga. London, Routledge.

Flyvbjerg, B. (1998). Power and Rationality. Chicago, University of Chicago Press.

Foucault, M. (1980). Power/knowledge: Selected interviews and other writings 1972 - 1977. New York, Pantheon Books.

Foucault, M. (1991). On governmentality. The Foucault Effect: Studies in Governmentality. G. Burchell, C. Gordon and P. Miller. London, Harvester Wheatsheaf.

Gal, I., M. van Groenestijn, et al. (2003). ALL Numeracy Framework. Adult numeracy and its assessment in the ALL survey: A conceptual framework and pilot results. Princeton, Educational Testing Services.

Gee, J. (2000). The New Literacy Studies: from 'socially situated' to the work of the social. Situated Literacies: Reading and Writing in Context. D. Barton, M. Hamilton and R. Ivanic. London, Routledge: 180–196.

Ghose, M. (2007). Exploring the Everyday: Ethnographic Approaches to Literacy and Numeracy. New Delhi, Nirantar.

Gilmore, A. (2005). The Impact of PIRLS (2001) and TIMSS (2003) in Low- and Middle-income Countries: an evaluation of the value of World Bank support for international surveys of reading literacy (PIRLS) and mathematics and science (TIMSS). Amsterdam, International Association for the Evaluation of Educational Achievement.

Goldstein, H. (1998). Models for reality: New approaches to the understanding of educational processes. Professorial lecture. University of London, Institute of Education.

Goodwin, M. (2009). "Which Networks Matter in Education Governance? A Reply to Ball's 'New Philanthropy, New Networks and New Governance in Education'." *Political Studies* 57(3): 680-687.

Gorur, R. (2011). "ANT on the PISA Trail: Following the statistical pursuit of certainty." *Educational Philosophy and Theory* 43(S1): 76 - 93.

Gorur, R. (2013). Beyond debunking: Towards a sociology of numbers. International symposium 'Literacy as Numbers'. Institute of Education, London.

Green, A. (1999). "Education and globalization in Europe and East Asia: convergent and divergent trends", *Journal of Education Policy* 14(1): 55 - 71.

Grek, S. (2009). "Governing by numbers: the PISA 'effect' in Europe." *Journal of Education Policy* 24(1): 23-37.

Grek, S. (2012). Learning from Meetings and Comparisons *World Yearbook in Education* 2012. Policy Borrowing and Lending in Education. G. Steiner-Khamsi and F. Walldow. New York, Routledge.

Grek, S. (2014). "OECD as a site of co-production: European education governance and the new politics of 'policy mobilisation'." *Critical Policy Studies*.

Guadalupe, C. and M. Cardoso (2011). "Measuring the continuum of literacy skills among adults: educational testing and the LAMP experience." *International Review of Education*.

Gurur, R. (2013). Beyond debunking: Towards a sociology of measurement. International symposium 'Literacy as Numbers'. Institute of Education, London. June 2013.

Haas, P. (1992). "Introduction: Epistemic communities and international policy coordination." *International Organization* 46(1).

Halpin, D. and B. Troyna (1995). "The Politics of Education Policy Borrowing." *Comparative Education* 31(3): 303 - 310.

Hambleton, R. and A. Kanjee (1993). Enhancing the validity of cross-cultural studies - improvements in instrument translation methods. Annual Meeting of the American Educational Research Association, Atlanta.

Hamilton, M. (2001). "Privileged Literacies: Policy, Institutional Process and the Life of the IALS." *Language and Education* 15(2): 178 - 196.

Hamilton, M. (2010). "Unruly Practices: What a sociology of translations can offer to educational policy analysis." *Educational Philosophy and Theory* 43: 55-75.

Hamilton, M. (2011). "Unruly Practices: What a sociology of translations can offer to educational policy analysis." *Educational Philosophy and Theory* 43: 55-75.

Hamilton, M. (2012). *Literacy and the Politics of Representation*. London, Routledge.

Hamilton, M. (2013). *Imagining Literacy through Numbers in an era of globalised social statistics*. Knowledge and numbers in education Seminar Series - Literacy and the power of numbers. Institute of Education London.

Hamilton, M. and D. Barton (2000). "The IALS: What does it really measure?" *International Review of Education* 6(5): 377–389.

Hamilton, M. and K. Pitt (2011). "Changing Policy Discourses: Constructing Literacy Inequalities." *International Journal of Education in Development*.

Harding, S. G. (1987). *Feminism and Methodology: social science issues*. Bloomington, Indiana University Press.

Head, B. W. (2008). "Three Lenses of Evidence-Based Policy." *Australian Journal of Public Administration* 67(1): 1-11.

Heeks, R. and C. Stanforth (2011). *Understanding Development Project Implementation: An Actor-Network Perspective on Local-Global Interactions*, LSE London.

Heintz, B. (2008). *Governance by Numbers. Governance von und durch Wissen*. G. F. Schuppert and A. Voßkuhl. Baden-Baden.

Henig, J. (1994). *Rethinking School Choice: the Limits of the Market Metaphor*. Princeton, Princeton University Press.

Henry, M., B. Lingard, et al. (2001). *The OECD, Globalization and Education Policy*. London, Pergamon.

Heyman, J. (1995). "Putting Power in the Anthropology of Bureaucracy." *Current Anthropology* 36(2): 261-287.

Heyneman, S. (1999). "The sad story of UNESCO's education statistics." *Int. J. of Educational Development* 19: 65–74.

Heyneman, S. and B. Lee (2012). "The Impact of International Studies of Achievement on Policy and Research." Unpublished paper.

Hirst, P. Q. and G. Thompson (1999). *Globalization in Question: The International economy and the possibilities of governance*. Cambridge, Blackwell Publishers.

Hitchcock, G. and D. Hughes (1995). *Research and the Teacher*. London, Routledge.

Howie, S. and T. Plomp (2005). *International Comparative Studies of Education and Large-Scale Change*. *International Handbook of Educational Policy*. N. B. e. al. Dordrecht, Netherlands, Springer. 1.

Jakobi, A. P. and K. Martens (2010). Introduction: the OECD as an actor in international politics. *Mechanisms of OECD Governance: international incentives for national policy-making?* A. P. Jakobi and K. Martens. Oxford, Oxford University Press: 163-179.

Jessop, B., N. Brenner, et al. (2008). "Theorizing sociospatial relations." *Environment and Planning D: Society and Space* 26(3): 389 – 401.

Jones, P. W. (1988). *International Policies for Third World Education, UNESCO, Literacy and Development*. London, Routledge.

Jones, P. W. (2007). "Education and world order." *Comparative Education* **43**(3): 325-337.

Kalton, G. M., L. Lyberg, et al. (1998). Review of Methodology, in US Department of Education. Adult Literacy in OECD Countries: Technical Report on the First International Adult Literacy Survey T. Murray, K. I. S. and J. L.B. Washington DC, U.S. Department of Education.

Kamens, D. H. (2013). Globalization and the Emergence of an Audit Culture: PISA and the Search for "Best Practices" and Magic Bullets. PISA, Power, and Policy the emergence of global educational governance H. D. Meyer and A. Benavot. Wallingford/GB, Symposium Books.

Kamens, D. H. and C. L. McNeely (2010). "Globalization and the Growth of International Educational Testing and National Assessment." Comparative Education Review 54(1): 5-25.

Kirsch (2001). ALL Prose and Document Framework. The International Adult Literacy Survey (IALS): Understanding What Was Measured. Princeton, Educational Testing Services.

Klees, S. and B. D. Edwards (2014). Knowledge Production and Technologies of Governance in Education. Governing Knowledge. Comparison, Knowledge-Based Technologies, and Expertise in the Regulation of Education. T. Fenwick, E. Mangez and J. Ozga. London, Routledge.

Landman, T. (2008). Issues and methods in comparative politics. New York, Routledge.

Lascombes, L. and P. Le Galès (2007). "Understanding public policy through its instruments – From the nature of instruments to the sociology of public policy instrumentation." Governance 20: 1 - 21

Latour, B. (1987). Science in Action. Milton Keynes, Open University Press.

Latour, B. (1988). The Pasteurization of France. Cambridge, Mass, Harvard University Press.

Latour, B. (1996). Aramis, or the Love of Technology. London, Harvard University Press.

Latour, B. (1996b). "On actor-network theory. a few clarifications plus more than a few complications." Soziale Welt 47: 369–381.

Latour, B. (1996c). "On Interobjectivity " Mind, Culture and Activity 3(4). Latour, B. (1999). "On Recalling ANT. In Actor Network Theory and After." The Sociological Review: 15-25.

Latour, B. (2000). "When Things Strike Back: A Possible Contribution of Science Studies." *British Journal of Sociology* 5(1): 105-123.

Latour, B. (2005). *Reassembling the social: an introduction to Actor-Network-Theory*. Oxford, Oxford University Press.

Latour, B. (2011). "Networks, Societies, Spheres: Reflections of an Actor-Network Theorist" *International Journal of Communication* 5: 796 - 810.

Law, J. (1986). *On the Methods of Long Distance Control: Vessels, Navigation, and the Portuguese Route to India. Power, Action and Belief: A New Sociology of Knowledge?* J. Law. Keele, Sociological Review Monograph: 234 - 263.

Law, J. (1994). *Organizing Modernity*. Oxford, Blackwell.

Law, J. (2008). "On Sociology and STS." *The Sociological Review* 56 (4).

Law, J. (2009). "Actor Network Theory and Material Semiotics." Downloaded in January 2014 at http://difi.uniud.it/tl_files/utenti/crisci/Law%202009.pdf

Law, J. and J. Whittaker (1988). *On the Art of Representation: Notes on the Politics of Visualisation. Picturing Power: Visual Depiction and Social Relations*. F. Gordon and J. Law. London, Routledge. Sociological Review Monograph.

Lehmkuhl, D. (2005). *Governance by Rating and Ranking*. Annual Meeting of the International Studies Association (ISA). Honolulu

Lemke, T. (2007). "An indigestible meal? Foucault, governmentality and state theory." *Distinktion: Scandinavian Journal of Social Theory* 8(2): 43-64.

Levine, K. (1998). "Definitional and methodological Problems in the Cross-National Measurement of Adult Literacy: The Case of the IALS." *Written Language and Literacy* 1(1): 41-62.

Li, T. M. (1999). "Compromising Power: Development, Culture and Rule in Indonesia." *Cultural Anthropology* 14(3): 295 - 322.

Limage, L. (1999). "Literacy practices and literacy policies: Where has UNESCO been and where might it be going?" *Int. J. of Educational Development* 19: 75 - 89.

Lingard, B. (2014). *Politics, Policies and Pedagogies in Education. The selected works of Bob Lingard*. London, Routledge.

Lingard, B. and S. Grek (2007). *The OECD, indicators and PISA: An exploration of events and theoretical perspectives. Fabricating Quality in European Education, Working Paper 2*. <http://www.ces.ed.ac.uk/research/FabQ/publications.htm> (accessed in May 2014).

Lingard, B., S. Rawolle, et al. (2005). "Globalizing policy sociology in education: working with Bourdieu." *Journal of Education Policy* 20(6): 759 - 777.

Lo Bianco, J., R. Wickert, et al. (2001). *Australian Policy Activism in Language and Literacy*. Melbourne, Language Australia.

Lockheed, M. (2013). *Causes and Consequences of International Large-Scale Assessments in Developing Countries. PISA, Power, and Policy the emergence of global educational governance* H. D. Meyer and A. Benavot. Wallingford/GB, Symposium Books.

Luhmann, N. (1995). *Soziale Systeme*, Stanford University Press.

Luhmann, N. (1997). *Die Gesellschaft der Gesellschaft*, Suhrkamp.

Luschei, T. F. (2004). *Timing is everything: The intersection of borrowing and lending in Brazil's adoption of Escuela Nueva. The global politics of educational borrowing and lending*. G. Steiner-Khamsi. New York, Teachers College Press: 154–167.

Maddox, B. (2007). "Secular and Koranic literacies in South Asia: From colonization to contemporary practice." *International Journal of Educational Development* 27 661-668.

Maddox, B. (2013). *Inside the assessment machine – The Life and Times of a test item*. International symposium 'Literacy as Numbers'. Institute of Education, London. June 2013.

Maddox, B. and L. Esposito (2011). "Sufficiency Re-examined: A Capabilities Perspective on the Assessment of Functional Adult Literacy." *Journal of Development Studies*: 1–17.

Mahon, R. and S. McBride (2008). The OECD and transnational governance. Vancouver, UBC Press.

Mann, M. (2000). Has globalisation ended the rise and rise of the nation state? The global transformation reader D. Held and A. McGrew. Cambridge, UK, Polity Press.

Martens, K. (2007). How to become an influential actor - the 'comparative turn' in OECD education policy. New Arenas in Education Governance K. Martens, A. Rusconi and K. Leuze. New York, Palgrave Macmillan.

Martens, K. and D. Niemann (2013). "When do numbers count? The differential impact of the PISA rating and ranking in education policy in Germany and the US." German Politics, DOI: 10.

McLean, M. (1995). Educational Traditions Compared: Content, Teaching and Learning in Industrialised Countries. London, David Fulton Publishers.

Meyer, H. D. and A. Benavot, Eds. (2013). PISA, Power, and Policy the emergence of global educational governance. Wallingford/GB, Symposium Books.

Meyer, J. W. and F. O. Ramirez (2000). The world institutionalization of education. Discourse formation in comparative education. J. Schriewer. Frankfurt, Peter Lang Publishers.

MOE Mongolia, National Centre for Non Formal and Distance Education and MOE Mongolia (2008). National Report on the Situation of Adult Learning and Education (ALE) - Mongolia Ulaanbaatar, Mongolia, National Centre for Non Formal and Distance Education.

MOES (2013). Annual education implementation report 2012/13 and plan 2013/14. Vientiane, Lao PDR, Ministry of Education and Sports.

Mok, K.-H. and A. Welch (2003). Globalization and educational Restructuring in the Asia Pacific Region. New York, Palgrave MacMillan.

Mons, N. (2013). Policy responses to PISA: A comparative investigation across OECD countries. 14th AEA Conference on 'International surveys, policy borrowing and national assessment', Sorbonne Paris.

Moore, G. A. (2002). *Crossing the chasm*. Harper Business Essentials.

Mosse, D. (2004). "Is Good Policy Unimplementable? Reflections on the Ethnography of Aid Policy and Practice." *Development and Change* 35(4): 639-671.

Murdoch, J. (1994). "Weaving the seamless web: consideration of network analysis and its potential application to the study of rural economy." Centre for Rural Economy working paper, University of Newcastle Upon Tyne, Centre for Rural Economy.

Murdoch, J. (1998). "The Spaces of Actor-Network Theory." *Geoforum* 29(4): 357 - 374.

Murray, W. and J. Overton (2003). *Designing Development Research. Development Fieldwork, A Practical Guide*. R. Scheyvens and D. Storey. London, Sage Publications.

Nespor, J. (2002). "Networks and contexts of reform " *Journal of Educational Change* 3: 365 - 382.

Newton, P. (2013). *In search of validity*. AEA. November 2013, Sorbonne, Paris.

Newton, P. and S. Shaw (2014). *Validity in Educational and Psychological Assessment*. London, Sage.

Noonan, R. (2011). *Education in Lao PDR: confluence of history and vision*. Education in South East Asia. C. Brock and L. Pe Symaco. Oxford, Symposium Books.

Nóvoa, A. and M. Lawn, Eds. (2002). *Fabricating Europe: The Formation of an Education Space*, Springer Netherlands.

Nóvoa, A. and T. Yariv-Mashal (2003). "Comparative Research in Education: a Mode of Governance or a Historical Journey?" *Comparative Education* 39(4): 423 - 438.

Nóvoa, A. and T. Yariv-Mashal (2014). *Comparative Research in Education. A mode of governance or a historical journey? Governing Knowledge. Comparison, Knowledge-Based Technologies, and Expertise in the Regulation of Education*. T. Fenwick, E. Mangez and J. Ozga. London, Routledge.

OECD (2000). Literacy in the Information Age. Final Report of the International Adult Literacy Survey. Paris, OECD.

OECD (2010). Education at a Glance. Paris, OECD.

OECD (2013). OECD Skills Outlook 2013: First Results from the Survey of Adult Skills. Paris, OECD Publishing.

OECD and Statistics Canada (1995). Literacy, Economy and Society: Results of the first international Adult Literacy Survey. Paris, OECD.

OECD/CERI (1995). The lifelong learner in the 1990s. Lifelong education in selected industrialized countries. D. Atchoarena. Paris, IIEP, UNESCO.

Owens, T. (2013). Thinking beyond League Tables: A Review of Researchers' Use of PISA Data PISA, Power, and Policy the emergence of global educational governance. H. D. Meyer and A. Benavot. Wallingford/GB, Symposium Books.

Ozga, J. (2009). "Governing education through data in England: from regulation to self-evaluation." *Journal of Education Policy* 24(2): 149-162.

Ozga, J. and B. Lingard (2007). *Education Policy and Politics*. New York, Routledge.

Ozga, J., T. Seddon, et al. (2012). Series Editors' Introduction. *World Yearbook in Education 2012. Policy Borrowing and Lending in Education*. G. Steiner-Khamsi and F. Waldow. New York, Routledge.

Perfetti, C. (2003). "The universal grammar of reading." *Scientific Studies of Reading* 7(1): 3-24.

Peters, G. and P. Jon (2006). *Handbook of Public Policy*. London, Sage Publications.

Phillips, D. (2004). Toward a theory of policy attraction in education. The global politics of educational borrowing and lending. G. Steiner-Khamsi. New York, Teachers College Press.

Phillips, D. (2004). Toward a theory of policy attraction in education. The global politics of educational borrowing and lending. G. Steiner-Khamsi. New York, Teachers College Press.

Pholsena, V. (2006). Post-war Laos: the politics of culture, history and identity. Singapore, ISEAS Publications.

Phraxayavong, V. (2009). History of Aid to Laos, Motivations and Impacts. Chiang Mai, Thailand, Mekong Press.

Pierre, J. and G. Peters (2000). Governance, Politics and the State. London, Palgrave.

Pinsent-Johnson, C. (2013). How learning inequality is made to happen: Curricularizing an international literacy test and classifying adult literacy learners. International symposium 'Literacy as Numbers'. Institute of Education, London.

Pizmony Levy, O. (2012). Testing for All, Stanford University. PhD dissertation.

Pons, X. and A. Van Zanten (2007). "Knowledge circulation, regulation and governance." Knowledge and Policy in education and health sectors Literature Review, part 6 (June).

Porter, T. M. (1995). Trust in Numbers, Princeton University Press.

Power, M. (1997). The audit society: rituals of verification. Oxford, UK, Oxford University Press.

Puryear, J. M. (1995). "International education statistics and research: status and problems." International Journal of Education Development 15(1): 79 - 91.

Rehbein, B. (2007). Globalization, Culture and Society in Laos. Oxon, Routledge.

Riessman, C. K. (2008). Narrative Methods for the Human Sciences United States of America. Los Angeles, CA, Sage Publications.

Rigg, J. (2005). Living with Transition in Laos, Market Integration in Southeast Asia. Oxon, Routledge.

Rizvi, F. (2007). Debating globalization and education after September 11. Education Policy and Politics. J. Ozga and B. Lingard. New York, Routledge.

Rizvi, F. and B. Lingard (2010). Globalizing Education Policy. London, Routledge.

Robertson, S. L. and R. Dale (2008). *Researching Education in a Globalising Era: Beyond Methodological Nationalism, Methodological Statism, Methodological Educationism and Spatial Fetishism. The Production of Educational Knowledge in the Global Era.* J. Resnik. Rotterdam, Sense Publishers.

Roe, E. (1994). *Narrative Policy Analysis: Theory and Practice*, Duke University Press.

Roever, C. and T. McManara (2006). "Language Testing: the social dimension." *International Journal of Applied Linguistics* 16(2): 242 - 258.

Rogers, A. (2007). "Women, Literacy and Citizenship." *International Review of Education* 53(2): 159 - 181.

Rogers, A. (2011). "Global perspectives on adult education." *Compare: A Journal of Comparative and International Education* 41(2): 301-303.

Rose, N. (1991). "Governing by numbers: figuring out democracy." *Accounting, Organizations and Society* 16(7): 673 - 692.

Rose, N. (1999). *Powers of Freedom: Reframing Political Thought*, Cambridge University Press.

Rose, R. (1993). *Lesson Drawing in Public Policy: A Guide to Learning Across Time and Space.* Chatham, N.J., Chatham House.

Rosenau, J. N. (1997). *Along the Domestic-Foreign Frontier: Exploring Governance in a Turbulent World*, Cambridge University Press.

Rossabi, M. (2005). *Modern Mongolia: From Khans to Commissars to Capitalists.* California, University of California Press.

Rottenburg, R. (2009). *Far-Fetched Facts.* Cambridge, Massachusetts, The MIT Press.

Rubenson, K. (2008). *OECD education policies and world hegemony. The OECD and transnational governance.* R. Mahon and S. McBride. Vancouver, UBC Press: 242-259.

Sabatini, J. P. (2004). Framework for the Assessment of Reading Component Skills, LAMP. Princeton, Educational Testing Services.

Sack, R. (1986). "UNESCO: From inherent contradictions to open crisis." *Comparative Education Review* 30(1): 112 - 119.

Sahlberg, P. (2011). *Finnish Lessons, What can the world learn from educational change in Finland?* New York, Teachers College Press.

Sanders, A. J. K. (1987). *Mongolia. Politics, Economics and Society.* London, Frances Publisher.

Sayer, D. (1994). *Everyday Forms of State Formation: Some Dissident Remarks on "Hegemony"*. *Everyday Forms of State Formation: Revolution and the Negotiation of Rule in Modern Mexico.* M. J. Gilbert and D. Nugent. Durham, NC, Duke University Press: 367-377.

Scharpf, F. W. (1978). *Interorganizational policy studies: issues, concepts and perspectives.* *Interorganizational policy making: Limits to coordination and central control.* K. I. Hanf and F. W. Scharpf. London, Sage.

Scheyvens, R. and D. Storey (2003). *Development Fieldwork: A Practical Guide.* London, SAGE Publications.

Schriewer, J. (1988). *The Method of Comparison and the Need for Externalization: Methodological and Sociological Concepts.* *Theories and methods in comparative education.* J. Schriewer and B. Holmes. New York, Peter Lang: 25 - 86.

Schriewer, J. and C. Martinez (2004). *Constructions of internationality in education. The global politics of educational borrowing and lending.* G. Steiner-Khamsi. New York, Teachers College Press: 29-53.

Sellar, S. and B. Lingard (2013). *PISA and the Expanding Role of the OECD in Global Education Governance.* *PISA, Power, and Policy the emergence of global educational governance* H. D. Meyer and A. Benavot. Wallingford/GB, Symposium Books.

Shagdar, S. (2000). *A historical overview of the development of education in Mongolia* (translated title from Mongolian). Ulaanbaatar, Publisher not available.

Shohamy, E. (2001). *The power of tests: a critical perspective on the uses of language tests*. London, Pearson.

Shilling, C. (2012). *The Body and Social Theory*. London, Sage.

Silova, I. (2005). *From sites of occupation to symbols of multiculturalism: transfer of global discourse and the metamorphosis of Russian schools in post-Soviet Latvia*. Greenwich, CT, Information Age Publishing.

Simons, H. (2009). *Case Study Research in Practice*. London, SAGE Publications.

Soros, G. (1998). *The Crisis of Global Capitalism* New York City, PublicAffairs.

Soukkongseng, S. (2008). *Education evolution development of Laos 1983 - 2020*. Vientiane, Lao PDR, National University of Laos.

Spring, J. (2004). *How Educational Ideologies are Shaping Global Society*. New Jersey, Lawrence Erlbaum Associates Publishers.

Spring, J. (2007). *A New Paradigm for Global School Systems: Education for a Long and Happy Life*, Taylor & Francis.

Spring, J. (2009). *Globalization of Education*. New York, Routledge.

St. Clair, R. (2012). "The limits of levels: Understanding the International Adult Literacy Surveys (IALS)." *International Review of Education* 58(6): 759-776.

Stake, R. E. (1978). "The Case Study Method in Social Inquiry." *Educational Researcher* 7(2): 5-8.

Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA, Sage.

Steiner-Khamsi, G. (2002). *Reterritorializing Educational Import: Explorations into the Politics of Educational Borrowing. Fabricating Europe: The Formation of an Education Space*. A. Novoa and M. Lawn, Springer Netherlands.

Steiner-Khamsi, G. (2003). "The politics of League Tables." Journal of Social Science Education 1: <http://www.jsse.org/index.php/jsse/article/view/470>

Steiner-Khamsi, G. (2004). The Global Politics of Educational Borrowing and Lending. New York, Teachers College Press.

Steiner-Khamsi, G. (2006). "The economics of policy borrowing and lending: a study of late adopters." Oxford Review of Education 32(5): 665-678.

Steiner-Khamsi, G. (2010). "The Politics and Economics of Comparison." Comparative Education Review

Steiner-Khamsi, G. (2012). Understanding Policy Borrowing and Lending. World Yearbook in Education 2012. Policy Borrowing and Lending in Education. G. Steiner-Khamsi and F. Waldow. New York, Routledge.

Steiner-Khamsi, G. and I. Stolpe (2006). Educational Import, Local Encounters with Global Forces in Mongolia. New York, Palgrave Macmillan.

Strang, D. and J. Meyer (1993). "Institutional Conditions for Diffusion." Theory and Society 22(4): 487 – 511.

Strange, S. (1996). The Retreat of the State. Cambridge, CUP.

Street, B. (1984). Literacy in theory and practice. Cambridge and New York, Cambridge University Press.

Street, B. (1995). Social Literacies: Critical approaches to literacy in development, ethnography and education. London, Longman.

Street, B. (1996). Literacy, economy and society. Literacy Across the Curriculum. Montreal, Centre for Literacy. 12: 8–15.

Street, B. (2013). Relationships of Policy, Theory and Research in the Literacy Field. Centre for Literacy Summer School. Montreal, Canada.

Stronach, I. (2010). *Globalizing education, educating the local: How method made us made*. London, Routledge.

Swank, D. (2005). "Globalization, Domestic Politics, and Welfare State Retrenchment in Capitalist Democracies." *Social Policy and Society* 4(2): 183-195.

Takayama, K. (2009). "Politics of Externalization in Reflexive Times: Reinventing Japanese Education Reform Discourses through 'Finnish PISA Success.'" *Comparative Education Review* 54(1): 51 - 75.

Takayama, K., F. Waldow, et al. (2013). "Finland has it all?: Examining the media accentuation of "Finnish education" in Australia, Germany, and South Korea."

Tett, L., M. Hamilton, et al. (2006). *Adult literacy, numeracy and language : policy, practice and research*. Maidenhead, Berkshire Open University Press.

Thorn, W. (2009). *International Adult Literacy and Basic Skills Surveys in the OECD Region*. OECD Education Working Papers. Paris, OECD Publishing.

Tilly, C. (2004). *Past, present and future globalizations. The global politics of educational borrowing and lending*. G. Steiner-Khamsi. New York, Teachers College Press.

Trohler, D. (2013). *The OECD and Cold War culture: Thinking historically about PISA. PISA, Power, and Policy the emergence of global educational governance*. Meyer and Benavot Eds. Wallingford/GB, Symposium Books.

UIS (2004). *LAMP International Planning Report*. Montreal, UIS.

UIS (2004). *National Planning Report Template*. Montreal, UIS.

UIS (No date). *LAMP Memorandum of Understanding*. Montreal, UIS.

UNESCO (2000). *UNESCO Institute for Statistics*. Paris, UNESCO.

UNESCO (2005). *Topics and Issues from the UNESCO Expert Meeting*. Paris, UNESCO.

UNESCO (2007). *Evaluation of the UNESCO Institute for Statistics*. Paris, UNESCO.

UNESCO (2008). The Global Literacy Challenge: a profile of youth and adult literacy at the mid-point of the United Nations Literacy Decade 2003-2012. Paris UNESCO.

UNESCO (2008). UNLD Mid-Decade review. M. Richmond, C. Robinson and M. Sachs-Israel. Paris, UNESCO.

UNESCO and International Bureau of Education (2010/2011). World Data on Education - Mongolia. Geneva UNESCO, International Bureau of Education.

UNESCO and International Bureau of Education (2010/2011). World Data on Education - Lao PDR. Geneva, UNESCO International Bureau of Education.

UNESCO Institute for Lifelong Learning (2009). Global Report on Adult Learning and Education. Hamburg, UNESCO Institute for Lifelong Learning.

UNESCO Institute for Lifelong Learning (2010). Belem Framework for Action Hamburg, UNESCO Institute for Lifelong Learning,.

Välijärvi, J., P. Linnakylä, et al. (2002). The Finnish success in PISA - And some reasons behind it. Jyväskylä, Institute for Educational Research, University of Jyväskylä.

Verger, A. (2013). The constitution of a global education policy market: the promotion and reception of PPPs in education. Rethinking Culture, Context and Comparison in Education and Development International Symposium, Teachers College, Columbia University.

Verger, A. (2014). "Buying (into) global education policies: Research notes on policy adoption, privatization, and the role of ideas." *Current Issues in Comparative Education* 16(1).

Vickers, D. and S. Fox (2005). Powers in a factory. Frederiksberg, Copenhagen Business School Press.

Vorapheth, K. (2007). Laos, La redéfinition des stratégies politiques et économiques (1975 - 2006). Paris, Les Indes Savantes.

Wagner, D. A. (2010). "Quality of education, comparability, and assessment choice in developing countries." *Compare: A Journal of Comparative and International Education* 40(6): 741 - 760.

Waldow, F. (2009). "Undeclared Imports: Silent Borrowing in Educational Policy-Making and Research in Sweden." *Comparative Education* 45(4): 477 – 494.

Waldow, F. (2012). Standardization and Legitimacy: Two central concepts in research on educational borrowing and lending. *World Yearbook in Education 2012. Policy Borrowing and Lending in Education*. G. Steiner-Khamsi and F. Waldow. New York, Routledge.

Watt, D. (2003). *Six Degrees, The Science of a Connected Age*. London, Random House.

Weiss, L. (2003). *States in the Global Economy: Bringing Domestic Institutions Back*. In, Cambridge University Press.

Wells, R. and A. B. Henkin (2005). "Exploring the Trend toward Isomorphism in International Education." *International Journal of Educational Reform* 14(3): 268-281.

Winter, G. (2000). "A comparative discussion of the notion of 'validity' in qualitative and quantitative research." *The Qualitative Report* [On-line serial] 4((3/4)): Accessed on 22/24/13 at <http://www.nova.edu/ssss/QR/QR24-23/winter.html>.

Wiseman, A. (2013). *Policy Responses to Pisa in Comparative Perspective. PISA, Power, and Policy the emergence of global educational governance*. H. D. Meyer and A. Benavot. Wallingford/GB, Symposium Books.

Wiseman, W. A. E. (2010). *The Impact of Educational Achievement studies in education policymaking*. Bingley, Emerald.

Wright, B. D. and M. H. Stone (1979). *Best Test Design*. Chicago, Mesa Press.

Yin, R. K. (2009). *Case Study Research: Design and Methods*. Thousand Oaks, CA, Sage.

Zumbo, B. D. (2009). Validity as Contextualized and Pragmatic Explanation, and Its Implications for Validation Practice. *The Concept of Validity: Revisions, New Directions and Applications*. R. W. Lissitz. Charlotte, NC, IAP - Information Age Publishing: 65-82.

Zymek, B. and R. Zymek (2004). Traditional - national - international: Explaining the inconsistency of educational borrowers. *Educational policy borrowing: Historical Perspectives* D. Phillips and K. Ochs, Didcot. Symposium.

Appendices

The next pages contain appendices A to J as follows:

Appendix A – Interview questions

Appendix B – UIS non-disclosure agreement

Appendix C – UIS permission to publish

Appendix D – Letter from UIS to Lao PDR

Appendix E - Letter from UIS to Vietnam

Appendix F – Letter from UIS to Mongolia

Appendix G – Permission to do research in Lao PDR

Appendix H – Permission to do research in Mongolia

Appendix I – Background information and letter of consent for research participants

Appendix J – Lao PDR literacy statistics