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Decision-making for local implementation of education and Technical and Vocational Education and Training (TVET) in Myanmar

A case study of the LAMTIB Initiative

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Problem description

According to UNESCO (2013) education is the Sustainable Development Goal which will make all the others possible to fulfil. Ensuring quality education directly influenced the cycle of poverty and contributes to development all over the world. Myanmar is one of the Norwegian Agency for Development Cooperation's (NORAD) priority countries, and upon recognition of the importance of education and TVET, several relevant grants for initiatives and businesses who wish to establish themselves there, are available. Further, data on international investment into the country shows that since the liberalisation process begun, investment has gained significant momentum (NORAD, 2014).

The purpose of this thesis is to investigate how education and TVET modules can be implemented on the local level in Myanmar, using a decision-making framework. It will make use of the decision-making theoretical framework in order to also make recommendation for future initiatives and businesses.

Preface

Studying education and TVET, particularly in Myanmar, was far from the first idea I had for my master's thesis. It was not until I was chosen as an intern for the Leapfrogging Autonomous Micro- Technopolis In Boxes (LAMTIB) development project, that I first was introduced to the topic. Consequentially, I had to ask myself; 'In what ways can I contribute to the evolution and success of the Initiative, as imagined and executed by Tom Preststulen and Partners?'. Having focused mostly on the 'human' story of inequality, globalisation and development throughout my academic career, it was entirely natural that I focus on a similar subject to use in my master's thesis for Master of Science: Globalisation, transnationalism and culture.

The study is, like the MSc programme, a marriage of different academic approaches and discourses. The overall framework is intended as a decision-making and business research, but the individual sections also focus on analysis as used in human geography, theories and practices of sustainability, and research into a previously closed off culture of a developing country. Consequentially, the Methodology and Theories chapter are extensive and important to ensure theoretical vigour and adequacy (Crang & Cook, 2007).

General description of the internship

The LAMTIB initiative was at the time of my involvement based in Singapore, in the office of Mr Preststulen and ELKEM AS. Consequentially myself, and my internship partner Vilde Berg, spent the semester there under the guidance of Mr Preststulen and other involved actors who visited the office. This involved working on an internship report on the work which we did there, planning and executing fieldwork for the report and our thesis, as well as a conference in South Korea for the Asia Europe Foundation ASEF Young Leaders Summit 2 on youth unemployment in Europe and Asia.

Upon researching the Initiative, it was clear that education and Technical and Vocational Education and Training (TVET) was where my previous experience could be most of use, and which would be most interesting to engage in as a theme. Having arrived in Singapore, we first met the LAMTIB country coordinator for Myanmar, Ms. Soe Thet San, who urged us to focus on this area as the LAMTIB launce site in Meiktila, Myanmar was at the time under construction. After discussing with Mr Preststulen, the first steps of the research process, and internship report production, began.

The internship report focused on making specific proposals of thematic implementation to the Education and TVET module for the Initiative, on a tentative basis. In many aspects it was a

description of the authors work in the field, and a precursor to the thesis. The report and thesis differ in academic purpose, analytic design and theoretical approach, and could be described as the starting point of this thesis. This thesis will take this foundation and build an academically valuable and comprehensive theory to not only sustain the report, but also contribute to the greater academic discourse on its own terms.

Acknowledgements

This thesis is the culmination of a two-year master program at the Norwegian University of Science and Technology, an internship in Singapore under Elkem AS (LAMTIB Initiative), and my background as a BA (hons) in International Relations at the University of Durham. It would be nothing short of a disservice not thanking all those who have urged me to continue this path throughout my academic career, and who continue to inspire me in looking towards my future.

I have been fortunate throughout my university years to have enjoyed being under tutelage of great academics. I would like to thank my supervisors John Eilif Hermansen and Haley Knudson, who helped me push forward. While I might be an independent worker, they greatly helped me see ways I could improve the study. I would also like to thank them for being available also in busy near-deadline periods, I am grateful for your input and having had your guidance. Nina Gunnerud Berg was also very helpful in developing the methodology for the study. I first had her in the qualitative methodology subject in my first MSc year, and further she helped find literature which had solutions to the many ethical and methodological dilemmas I felt I was facing.

The LAMTIB Initiative experience would not have been the same without Tom Preststulen, who enabled myself and my intern colleague and 'boatmate' Vilde Berg to experience both Singapore and Myanmar. Soe Thet San was a great travel mate as well as friend in facing the many-sided research process in Myanmar. I hope the study will be helpful, and that we will see each other again. Her family as well as the friends we made in Myanmar will also always be remembered fondly. Finally, I would like to thank Alan Lee and Vanessa Oh for their encouraging and always brightening presence in the office.

Closer to my heart, I would also like to thank my amazing friends who have helped me throughout these last two years. I have had amazing experiences, but it would not have been possible without knowing you were there. Some friends stayed in Norway and were never forgotten in my time abroad, while others were found in my travels and will never be left behind in my heart. The most unfamiliar of places are like home with friends like these. Especially, I would like to thank my partner and best friend, who not only helped me recover from illness after Myanmar when he could have been out exploring Singapore, but also have been a great support during this last intensive semester.

Table of Contents

Abstract

The study uses a decision-making theoretical framework to analyse implementation of education and Technical and Vocational Education and Training (TVET) in Myanmar on the local level. To analyse this effectively, the case of the development initiative LAMTIB is employed. It implements a business research approach to build precedented recommendations. It does this by using secondary sources to build a macro overview of education and TVET, as well as to gain an understanding of similar projects being developed in the country. Further, using primary sources the study is able to find the situation as it is locally in Meiktila, where LAMTIB is launched and the education and TVET module is currently being developed. Thus, the study ensures to include the sociocultural and real needs of the local population.

LAMTIBs approach to education and TVET is untraditional in comparison with other Non-Governmental Organisations (NGO's), which is necessary for management to address in developing the programme. Further, the Myanmar education system focus solely on exams and consequentially the rote learning system is addressed as in need of attention. Primary sources show that the subjects they study in university are mostly irrelevant, as the students want a degree to get *any* job rather than see a relevancy for their subject and future employment.

The lack of financial resources as well as qualified teachers means that a single teacher can be asked to teach over 50 students at once. Consequentially, there is a lack of understanding in the education system, with students simply learning steps rather than how subjects can be applied. A considerable skill-gap is thus created, between the labour market in considerable need of skilled workers, and the students who graduate from university.

This is also found in TVET, where there are few available courses, and the training is often as inadequate as in other higher education. In terms of vocational and technical training, there are few formal institutions, and most employers find that they must teach graduates and dropouts alike basic skills. On-the-job training through repetition is thus prevalent, which can be used to the initiatives advantage. Life-long learning is argued to be available through university enrolment and the prevalent on-the-job training.

Finally, the findings are evaluated by using the precedent model, as well as cycle of poverty theory, and the Sustainable Development Goal 4 targets. This way, the study evaluates the potential sustainable impact of such an Initiative on the future, by using the local situation as its foundation. The Initiative is found to be able to greatly impact the local situation for poor and low-income peoples, should it follow the recommendations made in this study.

List of Acronyms

ASEAN..THE ASSOCIATION OF SOUTHEAST ASIAN NATIONS

DICA...THE DIRECTORATE OF INVESTMENT AND COMPANY ADMINISTRATION

EMS...EDUCATION MANAGER SOURCE

EU...EUROPEAN UNION

FDI..FOREIGN DIRECT INVESTMENT

HIC...HATCHERY IN A CONTAINER

ICT..INFORMATION AND COMMUNICATIONS TECHNOLOGY

ILO...INTERNATIONAL LABOUR ORGANISATION

IMTA...INTEGRATED MULTI-TROPHIC AQUACULTURE

LAMTIB..LEAPFROGGING AUTONOMOUS MICRO- TECHNOPOLIS IN BOXES

LD STUDENT..LONG-DISTANCE UNIVERSITY STUDENT INFORMANT

MDGS...MILLENNIUM DEVELOPMENT GOALS

MIMU..MYANMAR INFORMATION MANAGEMENT UNIT

MOE..MINISTRY OF EDUCATION

MSWRR..MINISTRY OF SOCIAL WELFARE, RELIEF AND RESETTLEMENT

NGO..NON-GOVERNMENTAL ORGANISATION

NLD...NATIONAL LEAGUE OF DEMOCRACY

OECD...THE ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

SDG...SUSTAINABLE DEVELOPMENT GOALS

TVET...TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING

UN...UNITED NATIONS

UNDP...UNITED NATIONS DEVELOPMENT PROGRAMME

UNESCO.......................................THE UNITED NATIONS EDUCATION, SCIENTIFIC AND CULTURAL ORGANISATION

UNFPA...UNITED NATIONS POPULATION FUND

UNHCR..UNITED NATIONS HIGH COMISSIONER FOR REFUGEES

UNICEF..THE UNITED NATIONS CHILDREN'S FUND

USFG..UNIVERSITY STUDENT FOCUS GROUP

List of Figures

List of Tables

'Chances are you haven't been to this place. Chances are this is a place you've never seen. Other than maybe blurry cell phone videos, old black-and-white newsreels from World War II. Chances are bad things were happening in the footage you saw. Myanmar, after 50 years of nightmare, something unexpected is happening here, and it's pretty incredible.'(Cable News Network, 2014)

1. Introduction

The purpose of this thesis is to investigate how education and Technical and Vocational Education and Training (TVET) modules can be implemented on the local level in Myanmar, using a decision-making theoretical framework and qualitative methodology. To do this a business research approach is implemented, which is defined by Davis (1996) as '*systematic, controlled, empirical, and critical investigation of phenomena of interest to managerial decision makers*'. In this thesis, the managerial decisionmakers and case, is the development initiative Leapfrogging Autonomous Micro- Technopolis In Boxes (LAMTIB). The thesis will thus be academically valuable, furthering understanding of the local phenomena of education and TVET in Myanmar, but also contribute to the LAMTIB Initiative. It will make use of the decision-making theoretical framework in order to also make recommendation for future initiatives and businesses.

Myanmar is one of the Norwegian Agency for Development Cooperation's priority countries, and upon recognition of the importance of education and TVET, several relevant grants for initiatives and businesses who wishes to establish themselves there, are available. Further, data on international investment in the country shows that since the liberalisation process begun, investment in to the country has only gained momentum (Norad, 2014). The Directorate of Investment and Company Administration (DICA) in Myanmar has since 2012 worked to enable foreign investors a smooth transition into the Myanmar economy, and a simplification of the bureaucratic system. There is clearly a will in Myanmar as well as internationally to engage in foreign investment in the country. Thus, one can see the need for a comprehensive study on implementation for businesses and initiatives in Myanmar.

UNESCO argued in 2013 that education is what will make the then soon to be finalized Sustainable Development Goals possible to fulfil. They argue that ensuring quality education directly influences the cycle of poverty and contributes to development all over the world. Ensuring the success of all Sustainable Development Goals (SDGs) thus means, it is argued, incorporating quality education of different forms into every goal. Quality education is therefore important in ensuring sustainable development in general, but in particular for initiatives such as LAMTIB which aims to empower local populations. Evaluating how the

1

Initative might influence these two factors, the cycle of poverty and SDG 4, is thus essential to understand its operational and functional sustainability.

In order to make a beneficial study of these issues, the following study has put much focus on the lived experiences of the people in Myanmar, as well as the relationship between LAMTIB and the Myanmar context. As the study concerns itself with two perspectives, that of Myanmar, and that of LAMTIB, it is crucial to discuss both. The study would not have been possible without its ties to LAMTIB, and the fact that the Initiative will launch in Myanmar, makes the local conditions relevant. The study therefore toes the line between a business approach, hoping to improve a process, and that of socio-anthropological research. By using a comprehensive theoretical framework, this line is made clearer as the study is indeed made to further understanding for businesses and initiatives who wish to implement themselves in Myanmar on the local level.

A key aspect of the study is its focus on building a precedence model for the benefit of the decision-making framework. International aid and Foreign Direct Investment (FDI) is often discussed, but these discussions tend to revolve around the macro level. The clearest examples are the Paris Declaration (2005) and Accra Agenda (2008) (OECD, 2005). However, the initiatives that come out of these discussions will affect the lives of local people, far removed from these conversations. The study thus wishes to use this opportunity to develop a new approach, where sociocultural, contextual and the real needs of the local population are addressed by development initiatives. The study calls it a decision-making framework based in a precedent model.

The study uses both primary and secondary data extensively to ensure triangulation, and to provide thorough precedent bound recommendations. The situation as has been found, as well as the Initiatives potential effect on it, is evaluated through the cycle of poverty theory as well as SDG 4. In conclusion the study will argue that there is a huge potential in decision-making processes in using a precedent model approach, and specifically that LAMTIB will be a great contribution to the local community in Myanmar where it is launching.

1.1. Research Aims and Questions

Having in mind the above-mentioned business research approach, the research questions should be interpreted critically as questions which can directly help evolve the LAMTIB Initiative. However, they also aim to ensure academic value and give insight into the lived experiences of the peoples in the local communities where the Initiative wishes to implement itself.

1. How can the education and TVET module of LAMTIB be improved?
2. How can these improvements best be implemented into society at the launch site, looking towards the future?
3. What are the negative or positive aspects of the education and TVET training module, from the perspective of sustainability and further implementation?

The questions give relevancy not only to the Initiative itself, but also to the local community and their way of life, as well as a critical evaluation of the module. Thus, the research questions clearly hold value to society, but also has value to the Initiative. Further, the thesis will also contribute to evolving theoretical discourse on implementation of education and TVET in developing countries through foreign, international organisations.

1.2.   Structure of the Study

The thesis will emphasise a business research approach, aiming to give a critical, empirical discussion of the Initiative's needs while analysing education and TVET on the local level in Myanmar. Following the umbrella of the decision-making theoretical framework, the study is divided into five main 'bulks'. The first is that of problem recognition: introduction; contextual, concept and theoretical description and analysis; as well as methodology, methods, and ethical considerations. The second is information search or general information about education and TVET in Myanmar, and past research into the topic. Thirdly, problem analysis where the primary data is categorised and analysed. Fourthly a discussion of the findings, before finally recommendations and conclusion.

Thus, the study will have made a thorough discussion of how an education and TVET module, within the aspects of the LAMTIB Initiative, could be implemented. By basing the study on the local context, sociocultural aspects and real needs of the local community, the implementation process as well as the decision-making process can be considered better and more informed.

2. LAMTIB: Case and Context Description

The study has contextually two main factors: LAMTIB being the case, and Myanmar being the setting. LAMTIB is used in order to explain the issues and opportunities which relate to business and actors. Its structure, history and vision are important to focus the study in terms of which parts of Myanmar education and TVET it should discuss. Also, key to contextualise the study, is the literature review which will identify key literature, their strengths, weaknesses, and how they have been used throughout the thesis.

Firstly, the Initiative will be discussed, giving a broad description showing key elements important to Education and TVET. For the most part the description will rely on earlier master's thesis's (Aunemo, 2015; Forset, 2015; Samuelsen, 2017), information given in Preststulen & Partners (2016) and personal interviews with staff related to the Initiative in Singapore and Myanmar. The main themes discussed are: 2.1.1 Key features, 2.1.2 The Initiative sites today, and 2.1.3 Education.

Secondly, Myanmar as a nation is highly complex, and in recent years many actors have shown interest in investing, either from a business perspective or as Non-Governmental Organisation (NGO) or charity work (Norad, 2014). Thus, it is essential to give a macro level description, both of the country historically and generally, but also of the current literatures' perspective of education and TVET in the country. These caveats are split into two: general and historical description in the contextual chapter, and an analysis of literature regarding education and TVET in the problem recognition chapter (chapter 5). This information is further developed in the problem analysis chapter, where it moves to the local mezzo level. For this chapter there are three main factors described: 2.2.1 Myanmar/Burma, 2.2.2 Practical information and 2.2.3 Political History and Development.

Lastly, the literature review will present the work of Aunemo (2015) and Forset (2015), in the LAMTIB section. Education and TVET in Myanmar on the other hand, is presented through the British Council Report '*Policy Insights for Higher Education*', as well as the article written by Kenneth King (2013). Finally, the highly applicable Hayden & Martin (2013) is presented. These will put the thesis into the context of existing literature and show how it gives academic value.

2.1. LAMTIB

The Initiative has been in creation since 2013, and was first conceptualised by Managing Project Leader and Partner Tom Preststulen (Aunemo, 2015; Preststulen & Partners, 2016). Foremost

the Initiative wishes to implement leapfrogging technologies[1] which can function as an autonomous micro-Technopolis in boxes/containers. By doing this, the containers can help alleviate several elements in the cycle of poverty (see section 3.1.2), by giving access to tech, electricity, and a network of partners which LAMTIB cooperates with.

LAMTIB is proposed as a solution to the issues made by climate change, population growth in the worlds' poorest countries, and the fact that 10.7% of the worlds' population live in poverty[2] (Preststulen & Partners, 2016; World Bank Group, 2018). It focuses on making use of human capital as well as the natural resources of the regions it is involved in, which in the case of Myanmar are quite considerable (Kende-Robb, 2017; Preststulen & Partners, 2016). Consequentially, through training and use of available technologies, LAMTIB hopes to empower the underprivileged[3] (Preststulen & Partners, 2016).

On an organisational scale, LAMTIB wishes to do this by engaging stakeholders, businesses and potential actors and use their strengths through cooperation to '*make a difference*' (Preststulen & Partners, 2016, p. 15). Their model is that of a social business, standing firmly on the knifes edge between an NGO and an enterprise. The vision for this approach is to focus on those in marginalised and/or off-grid areas which would make best use of such resources, furthering innovation and thus giving access to wider value chains to the local community and beyond (Preststulen & Partners, 2016). The resources are not sold to these regions, but rather '*made available*' in order to facilitate '*a practical rapid kick-start*' (Preststulen & Partners, 2016, p. 4).

2.1.1. Key Features of LAMTIB

The 'box' or container is a cost-effective solution to issues such as transportation in off grid areas, through ease of instalment, without the need for extra infrastructure construction. The box is a 20 feet container which can be easily shipped, are weather hardy, mobile and easily

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[1] By leapfrogging technologies, the thesis uses the definition given by Forset (2015, p. 1); more advanced, cleaner, more sustainable, less polluting, efficient technology, adopted to generate or accelerate sustainable development often in configuration with each other. Further than this, Forset (2015, p. 1) notes that LAMTIB also extends the term to innovation in technology, education, healthcare, sanitation, food production, and ICT.

[2] Poverty is in this thesis defined using the World Banks definition, where one is considered in poverty if one lives, on average, on less than US$1.90 a day.(World Bank Group, 2018)

[3] "Underprivileged" is defined by using Cambridge Dictionary's definition of: 'without the money, possessions, education, opportunities, etc. that the average person has' it refers to someone who does not have access to the 'basic social advantages' of the average person (Cambridge Dictionary, 2018).

adaptable. The result is an implementation which should be fast, competitive of alternative solutions, and sustainable (Preststulen & Partners, 2016).

The resources the container provide include '*enabling technologies*' such as Information and Communication Technologies (ICT), solar panels to harness solar energy, and on a baser level the structure of the box itself. These are described as the 'main pillar' of the Initiative (Aunemo, 2015, p. 45). These will then again enable the implementation of several modules; health care, sanitation, clean water, education and food production (see figure 1). This enables those involved at the launch sites access to these resources and will again enable innovation and creation of small scale businesses, which consequentially give a positive effect to their livelihoods and economic growth. Further, these modules cater to many base needs, and thus help break the cycle of poverty by promoting self-sufficiency. If through development the LAMTIB equipment is made redundant, the box can be implemented elsewhere (Preststulen & Partners, 2016).
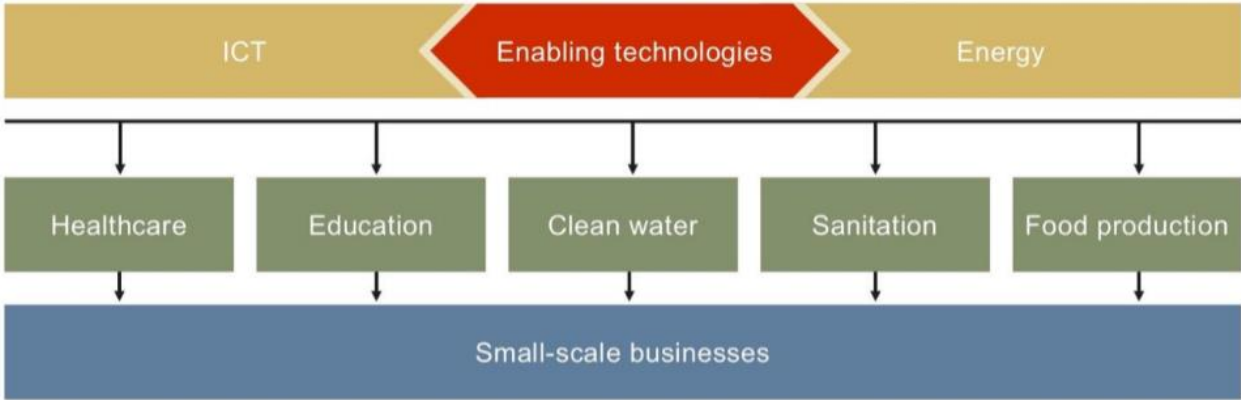
Figure 1: LAMTIB operational framework (Preststulen & Partners, 2016)

We can thus see LAMTIB as having three pillars, each enabling the other to stand. Where the (1) enabling technologies gives access to (2) expansive modules which improve quality of life to such a degree that allows for the creation of (3) small-scale business at a much lower risk. This final pillar is also a part of LAMTIB at launch, ensuring that the Initiative is able to financially support the community and itself (Preststulen & Partners, 2016).

These small-scale, social businesses are initially at launch considered by the LAMTIB management from the areas resources and skillset. The produced goods and/or services from these social businesses are reinvested in the Initiative. By doing this the project is able to launch

with a mind towards the future, rather than as a project which might fall through as funding is pulled back (Preststulen & Partners, 2016).

As LAMTIB is initially focusing on the regions of South East Asia, there have been found some examples of businesses suitable for the box. These include: Hatchery in a Container (HIC), where a plankton library is designed to aid in cultivating feed for water species, which then can be harvested; Coconut products, prevalent in Myanmar and used both in food and as materials for crafting; Integrated Multi-Trophic Aquaculture (IMTA), where a community cultivates salt water species for food production and marketing; battery recharging businesses, helping energy consumption, lessening hazardous waste and promotes use of rare earth metals sustainably; bamboo products such as food, buildings and construction, medicine, tools for farming as well as biofuel, can all be developed in areas where bamboo is prevalent (Preststulen & Partners, 2016). In this study, the first two social businesses are most relevant, HIC and coconut products.

The LAMTIB Initiative has developed a plan for implementation, which shows how these three pillars will be implemented logically as an organisation, rather than as individual parallel projects. This plan can be seen in table 1.

Table 1: The LAMTIB Process (Preststulen & Partners, 2016)

1 **Qualification of Sites**		
2 **Select Sites & LAMTIB Champions**	• Assessment of current situation • Local needs & resources • Institutional qualification	
3 **Configure Optimal Content**	• Identify allies • Integrate in partner programs • Coordinate with Authorities & Institutions • Align relevant training	
4 **Financial Solutions & Equipment Orders**	• Align improvement projects • Define financial & human resources • Financial agreements • Purchase & Lease contracts	
5 **Mobilization & Commissioning**	• Action structure • Strengthen team task force • Prepare sites • Logistic • Construction • Commissioning	• Training • Monitoring • Accounting • Auditing • Publicity

2.1.2. The Initiative Sites Today

The Initiative, today, does not operate within the parameters envisioned. There are three, soon to be four launch/development sites. The first two are both located in Philippines, while the third and soon to be fourth is in Myanmar. The sites are partly operational and in Philippines they are in development to establish feasibility, while in Myanmar they are built for proper

implementation of the Initiative. The first site in Myanmar was visited during fieldwork, and the township for the second launch was also visited.

Philippines, Bantayan, Barangay Sungko
Having been hit by the Haiyan typhoon in 2013, the island of Bantayan was devastated. Both its ecosystem and the populations livelihoods were at serious risk. The first LAMTIB hybrid box was shipped in 2014 to the village of Sungko barangay, providing essential aid and crisis-relief. The second pillar modules included a healthcare module and human resources from the Philippine Red Cross (Aunemo, 2015). Today, the site is enabling a school to run on electricity from its solar panels (Preststulen & Partners, 2016).

Philippines, Rhonda, Barangay Santa Cruz
This second site for the Initiative is located on the west coast of the island Cebu, and has been used mostly to develop the HIC and IMTA social businesses modules (Aunemo, 2015). The aim is to test feasibility, what kind of sites are preferable or required for the module to work, and what equipment should the modules have included at launch. There is yet no container at the site, and energy needs are met with fossil fuels. The site is run by Mr Alan Lee, and is remotely controlled by him in Singapore with the help of his colleague in Santa Cruz (A. Lee 2017, personal communication, 22 November).

Myanmar, Mandalay Region, Meiktila Township

Meiktila is located in the central plains, with relative closeness to large cities such as Mandalay, the capital Naypyitaw, and with buss connections to Yangon. The central plains have for a long time supplied other regions with labourers, as usually young men will move away to find work, making the region ideal in terms of labour supply for the social business (S. Thet San 2017, personal communication, 2-17 October).

The site was visited by the researcher during fieldwork for most of their stay and is where most primary data was gathered. Meiktila is the home village to the Myanmar country director, Ms Soe Thet San, where her family produces plant-based oils such as sesame and runs a grocery shop (S. Thet San 2017, personal communication, 2nd October).

The chosen site for launch is part of the land owned by her father, in the industrial zone just outside the city. On the land there are some smaller buildings where the plant-based oil production takes place, under supervision of the factory head worker Mr U Zaw Myint and his family who live on site. There is also a partly finished construction of a new factory building,

much larger than the previous mentioned buildings, which was never finished upon the death of the architect who had drawn the building (S. Thet San 2017, personal communication, 7th October). This building is then rented by LAMTIB and finished to implement the three pillars.

Consequentially, there is so far no container at this site, but the individual parts will be implemented. Solar panels as well as ICT is set up to enable production of coconut oil in the factory building, which will then be sold, and profit reinvested in expanding the Initiative (S. Thet San 2017, personal communication, 7th October; S. Thet San 2018, personal communication, 11th May). So far, the launch has faced difficulties in profitability, and little is done regarding implementation of the second pillar (S. Thet San 2018, personal communication, 11th May).

Myanmar, Tanintharyi Region, Myeik Township

Myeik is quite well known for its archipelago and is a beautiful tourist spot, as well as having a vibrant business community. Being on the extreme southern coast of Myanmar means many do business also outside the country, and the production of ice to ship seafood to the rest of the nation (and abroad) is an institutional industry for the township. The production of seafood, pearls and ice makes the region ideal for the HIC and IMTA social businesses.

While there, the researcher was explained that in this region, because of their trade success, many would rather do business than bother with political questions, thus explaining the relative calm in this region as opposed to more turbulent Regions and States in Myanmar (S. Thet San 2017, personal communication, 15 October).

The launch site for Myeik is yet to be decided, but to ensure profitability and continuation of the Initiative, the launch will be in not too long (S. Thet San 2018, personal communication, 11th May).

2.1.3. Education

For this thesis, the educational aspect of LAMTIB is the most interesting aspect of pillar two. The module for education does not have a program, conceptual framework, nor has it been executed at any sites. However, one can find from available literature what kind of education the Initiative wishes to provide.

LAMTIB wishes to implement action which helps alleviate issues that come with living in off-grid areas and with long distances, give access to knowledge databases and centres which would otherwise be unavailable, and TVET training (Aunemo, 2015). This will empower

underprivileged people, both in terms of academic attainment, but also practical skills which are needed in a globalised world. Particularly, management and maintenance are essential in order to run the project effectively (Preststulen & Partners, 2016).

Specifically, this will be done by giving the community access to digital education tools, such as e-Learning courses. These can be designed to cater to the community's needs, and assessment can be done through the pupils' '*performance in the field*' (Preststulen & Partners, 2016, p. 9). The education system is described in Aunemo (2015, p. 50) as a screen, which runs on solar electricity, which will be placed between two boxes. The screen will be connected to the ICT satellite system and give access to e-Learning systems and databases. The e-Learning systems should further be designed to include entrepreneurship skills, as well as documentation on how natural resources in the region can be used (Preststulen & Partners, 2016).

Consequentially, a range of tutorials and courses should be made available on the LAMTIB education platform, which will help them in their professional life as well as everyday skills (Aunemo, 2015). The platform is based on e-Learning, with a teacher able to assess students in the field. Further, cooperation must be established with NGOs or companies which can provide such a platform, or a section of LAMTIB must establish it.

2.2. Myanmar

The country is highly complex and as a setting for analysis, it is essential to first understand the basics of how this much talked about – but rarely understood – country has changed in recent memory. This section hopes to give a general overview, with which the reader can better understand the subsequent analysis. The themes explored here are: 2.2.1 Myanmar/Burma, 2.2.2 Practical information and 2.2.3 Political history and development. Matters relating to investment, education and TVET will be found later in the thesis in chapter 5.

2.2.1. Myanmar/Burma

The choice of the use of 'Myanmar' is important to justify. While The British Embassy in Rangoon still uses the name of Burma and Rangoon, it can also be found termed as Myanmar and Yangon (respectively) in most literature (Foreign & Commonwealth Office, 2018). The inconsistency comes from Myanmar's colonial past, as well as the whims of the military junta which ruled the country upon independence.

The military junta declared "Burma" to be an '*ethnic-supremacist*' relic from the colonial ages of British rule, as it refers to the Burmese – the largest ethnic group in the country (Economist, 2016d). Despite controversy, the name was thus changed to the Republic of the Union of

Myanmar, although the conversion is less part of the identity of the people itself, and more part of the political stakes. Expert in the region and anthropologist Gustaaf Houtman explained to the Economist that Burma is an everyday term, while Myanmar is seen as a formal or literary name (Economist, 2016d). It has since its implementation been a political tug-of-war between the two names, with the largest recent upset being Obamas choice to use Myanmar when meeting the former president, Thein Sein (Economist, 2016d).

Many political actors hold that Burma is the rightful name of the country, arguing that using Myanmar is an admonition to the military junta which still have both considerable *de facto* and *de jure* power in the nation. The choice of name for the country is thus a political one, and it is therefore important for it to be a conscious decision.

While the thesis will concern itself with many issues in Myanmar, it will not concern itself with the military and government power in other terms than as contextualisation. This is both because of the size and scope of the thesis, but also in order to focus the research such that the material has value, rather than be a superficial narrative of the experiences doing fieldwork. Therefore, while the arguments for the use of Burma are many, the thesis wishes to reflect the lived experiences of its informants, and during fieldwork Burma was never mentioned unless as an explanation of the country's colonial past.

Consequentially, for the purposes of the thesis, Myanmar and Yangon will be used. Firstly, for consistency, secondly to follow Norwegian common use, and thirdly because the informants and actors the researcher met with used this terminology.

2.2.2. Practical information

The nation has many factors working in its favour, not only is it one of the largest countries in South East Asia, it is also strategically placed between China, India, Bangladesh, Laos and Thailand. The potential for trade, as well as influence in a rapidly developing region, is profound (Johnston, 2018). Its 55 million population is considered very young, having a median age of only 28 and over 50% being in working age, in a period of time where many countries are facing a "greying economy" (Economist, 2008; Johnston, 2018, p. 144; noble solutions, 2017).

Further, the nation has considerable natural resources in almost every primary goods sector; oil, natural gas, rare minerals, valuable timber, precious minerals, livestock, as well as plenty fertile farmland (Asian Development Bank, 2014; Kende-Robb, 2017; Technical Assistance Consultant's Report, 2013). It is therefore not strange that, as Kende-Robb (2017) argues, for

some leaders in Myanmar, '*their country is an economic-power-in-waiting*'. However, as Kende-Robb (2017) also notes, there is a significant need for schools which can train their varied human capital, in order to make use of these resources.

There are seven states and seven regions[4] in Myanmar per the 2008 constitution (Rieffel, 2010). Additionally, there are five zones which are self-administered, as well as one division. The regions often have a Burmese ethnic majority, like Mandalay Region and Tanintharyi Region, while states tend to have ethnic minorities as their majority, like Chin State and Kachin State (MoE, 2015; Rieffel, 2010). These are again divided on the local level into districts, townships and villages (MoE, 2015). Fieldwork was done in Regions with a majority Burmese ethnic makeup. Thus, State politics and differences would simply make the thesis too general, and each State is highly varied, making it an impossible task in the time given.

Indeed, Myanmar is incredibly diverse; Burmese make up about 69% of the population, being followed by the Shan 8.5%, the Kachin at 6.2%, also Rakhine 4.5%, Chinese represent 0.7%, Indian 1.3%, as well as 'other tribes' which make up 6.99% (Kuppuswamy, 2013; noble solutions, 2017). In total there are more than 135 recognised racial groups in the country, where the Burmese regions tend to be in the developed heartlands, while the states are in the peripheral areas which make up 60% of the country (Hayden & Martin, 2013; Kuppuswamy, 2013; noble solutions, 2017).

Even still, Burmese is the official language of the country and English the secondary, although there are several hundreds of other languages used in the country. English is prevalent because of the nation's colonial past, where English was the primary language in the country from late 18 hundreds to 1964 (noble solutions, 2017). Religiously there is a clear Buddhist majority with 89.4% reportedly subscribing to the belief, while Christians are at 4.9% followed by Muslims at 3.9%, Animists 1.2%, Hinduism at 0.5% and finally 'others' at only 0.1% (Kuppuswamy, 2013).

However, despite this wealth of human and resource capital, Myanmar is and has been a 'least developed country' according to the World Banks statistics (Hayden & Martin, 2013). About 70% of the population live in rural areas, and nearly half the population has farming and keeping livestock as their livelihood (noble solutions, 2017; Technical Assistance Consultant's Report,

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[4] Regions were previous to the 2008 constitution called divisions, some interchangeability is found in literature, but for consistency region will be used in this thesis (Rieffel, 2010).

2013). A key obstacle for progress is productivity in use of farmland, production, and attainment of skills (Technical Assistance Consultant's Report, 2013).

On a positive note, Myanmar can boast that 46% of their workforce are women. This is however not reflected in terms of upper management or higher working positions, where women are still underrepresented (Technical Assistance Consultant's Report, 2013; Zaw-Aung, 2017). This might be affected by the fact that, as Tin, Lall, & Lorch (2008) argues, Myanmar society is made up of five pillars – which all are in nature positions which often limit access to women – '*farmers, workers, students, monks, and the military*' (Tin, Lall, & Lorch, 2008, p. 113).

2.2.3. Political History and Development

This '*arrested development*' is in literature argued to be a result of poor transition after colonial rule, where the institutions and system structures did not translate naturally into the sociocultural environment of the country (P. Clapp, 2007, p. 6). While there was a democratic parliamentary system in place post-independence which did function, there was not developed an identity of national union of Myanmar's many ethnic and religious groups (P. Clapp, 2007). Further, Clapp (2007) argues that it was the majority Burmese which preferred socialism, with a centralised economy, which disrupted development.

Consequentially, the unrest and lack of strong inclusive institutions gave rise to the military junta which took power, and still have it today. Military rule has been in place since 1962, under which a range of generals in power has ensured control of most civil, economic and political society (P. Clapp, 2007). After years of such control, Clapp (2007, p. 6) further argues that civilian society has been losing its 'ability to take collective responsibility' of the situation. Therefore one can argue that Myanmar looks more like post-colonial African nations, then that of Asian (P. Clapp, 2007).

The 2008 constitutional reform came therefore, Clapp (2007) argues, from the student union and student activists which revolted against the military. Hoping to please the masses, and solidify military control, an election was held in 1990. Unfortunately, the election did not have the desired results, and the National League for Democracy (NLD), led by Daw Aung San Suu Kyi overwhelmingly won the election. The results were met with a refusal to secede from power from the junta, who demanded that the constitution would have to be changed before the results came into effect. The NLD was met with heavy constraints and harassment, and predictably were unable to participate in the redrafting which took 18 years to finish (P. Clapp, 2007).

This new constitution ensured the junta several key powers in the new political landscape: they have ensured political majority in all constitutional matters by having a quarter of parliamentary seats, effectively being able to veto changes (Amnesty, 2017). They control key ministries relevant for military matters, such as border affairs, and the defence and home affairs ministries. Finally Aung San Suu Kyi is barred from the office of president (Amnesty, 2017; Hayden & Martin, 2013). The clause is known as clause 59(f) and bars anyone with immediate family members which do not hold citizenship in Myanmar, from becoming President. This thus makes it impossible for Aung San Suu Kyi, as she has two children with British citizenship. The militaries veto block has prevented amendments to this clause (Economist, 2016c).

The NLD has won subsequent elections, in November 2015 they again won in a '*landslide*' (Economist, 2016b). In this election Htin Kyaw became president, but was replaced in March 2018 by Win Myint because of health concerns (BBC Monitoring, 2018). Either way, it is mostly recognised that this position is a ceremonial one, to please the requirements set up by the junta in the constitutional reform – Aung San Suu Kyi has herself said '*that she would be "above the president"*' according to the Economist (Economist, 2016c). Aung San Suu Kyi herself took the position of State Councillor, a previously non-existent position '*created especially for her',* which Amnesty (and most literature on the topic) argues gives her the *de facto* power of the civilian government (Amnesty, 2017, p. 263).

Aung San Suu Kyi's government has overseen many reforms and changes to the state, many which are viewed positively internationally. These include greater political freedoms and allowing international actors access. Also, Myanmar is now open for diplomatic relations and foreign investment, particularly with the West, although these relations have become constrained with the Rakhine crisis (Amnesty, 2017; Hayden & Martin, 2013).

Particularly the government wishes to lessen the budget deficit, and make the government leaner (Economist, 2016b). Many ministries are overlapping in nature and responsibilities, and Win Htein, an NLD spokesman, said to the *Myanmar Times* that they might scrap the deputy minister post in its entirety. This could potentially give high returns, as there were in 2016 100 deputy ministers and 36 ministries (Economist, 2016b). This goal might still be difficult to achieve, considering the militaries control of the General Administration Department, which is the '*backbone of the country's bureaucracy*'. The Department has made it difficult to divert considerable resources the military requests from the state budget, 6% of the 2017 year budget (Economist, 2016b).

The result is a highly centralised state, which today is still finding how to combine their colonial inspired democratic system with the local niches of Myanmar, in order to create a functional institutional structure (Asian Development Bank, 2014; Dickenson-Jones, De, & Smurra, 2015). As Dickenson-Jones, De and Smurra (2015) argues, '*both the extent and nature of government responsibilities are still being determined'*. There are also still considerable political constraints from the military junta, making the reform process in most every sector one which must be treaded carefully. Particularly there is an emphasis on the need for decentralising power and strengthening local state and region governments (Dickenson-Jones et al., 2015).

2.3. Literature Review

Relevant texts for this study can be placed into two categories, in one is literature pertaining to LAMTIB and the initiative, in the other, literature which concerns itself with education and TVET in Myanmar. The key literature used throughout the thesis is identified and discussed in this section. The strengths and weaknesses of the literature is presented to contextualise the study as part of the broader academic literature. In the LAMTIB section the work of Aunemo (2015) and Forset (2015) is presented. For education and TVET in Myanmar, the British Council Report '*Policy Insights for Higher Education'* will be discussed, as well as the article written by Kenneth King (2013). Finally, the highly applicable Hayden & Martin (2013) is presented.

2.3.1. Literature Pertaining to LAMTIB

Two LAMTIB relevant master thesis's have been used in this study. Helga Aunemo is the author of the first thesis, entitled '*Implementing Off-Grid Solar Solutions in Southeast Asia: A CSR-based Approach to Rural Development'* (2015), Marte Blekastad Forset authored the second '*Sustainable Food Security as Development Strategy. FAO's sustainable food security and local development strategies. Case: The LAMTIB Initiative in Southeast Asia'*.

Aunemo (2015) wished to analyse how rural areas in Southeast Asia could be further developed by implementing solar energy. Because these markets are considered less lucrative by large distributers, LAMTIB could potentially have a significant effect on these people's lives. However, she argues that businesses must identify the true needs of the populations where they wish to implement solutions, in order to promote stakeholders' commitment. Aunemo (2015) also analyse the LAMTIB Initiatives potential to fulfil the SDGs, rating the relevant goals and the Initiatives application of them. She finds that there is a high convergence between the

Initiative and the SDGs, particularly in terms of SDGs relating to food, renewable energy, education and economics. There were also identified five goals with medium convergence, which could thus be used to further develop the initiative to promote also these goals.

This thesis is thus relevant to this study because of its SDG and development approach. The needs of the local population requirement are also further developed and used in this thesis in the theory chapter (3.1.4). However, it does not go deeper into this recommendation, and does not look at the lived experiences of the populations it discusses. This study is thus taking the next step in terms of further developing these findings in tandem with building an understanding of the context and precedent of society where LAMTIB is building a presence.

Forset (2015) wrote her thesis at the same time as Aunemo, but focused rather on the topic of food scarcity, and its effect on development. As the UN points out, the world is facing an increasingly challenging situation in terms of food insecurity, with over 843 million people living through it. This is particularly true in Asia, which makes Initiatives such as LAMTIB crucial for survival. The study engages the LAMTIB Initiative by evaluating how it can promote food security, and then particularly in how it can encourage development. It is found that there is a strong link between development and food (in)security. Particularly, there is a link between poverty being the cause of hunger. There is a need of infrastructure, increased income and social security, to prevent food insecurity to persist, which means that poverty must be alleviated. It is especially emphasised that cooperation is crucial to end food insecurity, this being between the global and the local. Food insecurity is too large a problem to face alone. Thus, LAMTIB has a high potential to impact food insecurity in a positive manner.

While Forset (2015) thus focused on food, it is clear that it is deeply connected with poverty, which is also relevant for this thesis. As poverty is a key driver for food insecurity, it is also only solved by bettering education attainment (see 3.1.2.). One can thus argue that implementing education and TVET is a way of addressing food insecurity. However, to implement these Initiatives, one must establish the framework and plan, which must be done through informed decision-making such as what is presented a framework for in this study.

2.3.2. Literature Pertaining to Education and TVET in Myanmar

The British Council report: '*Policy Insights for Higher Education: Recommendations for HE reform in Myanmar*' (2013) was written as part of the British Council – Myanmar development partnership, by which they hope to promote education reform. It summarizes an extensive

dialogue between over 60 participants of a conference. It finds five key aspects of education which can be reformed to function more efficiently. Firstly, universities should be of benefit to the public, secondly, the higher education sector needs revitalisation, thirdly, the education systems need to be improved, fourthly, the quality of learning must be addressed, and lastly there is a need for higher inclusivity.

The report in itself is relatively short at nine pages long but does carry many key elements which have been helpful in the document analysis chapter (chapter 5). Its overall stance is optimistic for the future, and the recommendations tend to be operational. It considers most every level of education to some extent and contains both positive and negative aspects. It is thus a key document to understand education and TVET in Myanmar but is by now dated.

The second key literature is part of the same report, but is an annexed article written by Kenneth King (2013). It is entitled '*Higher Education Reform In Myanmar: Policy Insights And Recommendations*'. The article is written for the Parliamentary Higher Law Committee and aims to introduce challenges related to higher education in Myanmar, and how reform might be established. It was researched through meeting different stakeholders and interviews at universities, as well as meetings with other stakeholders. He discusses thoroughly the reform process as it stood at the time, and the experiences of the university students throughout the article.

Some aspects are criticised, such as the multi-ministry approach to universities, the learning environment and the autonomy of the universities. Some recommendations are given on how these can be solved, such as Quality Assurance Frameworks for university teachers and decentralisation. Some recommendations for general policy reform encompass a recognition of the fact that the current system reinforces itself through lack of funding and student experiences. One should thus focus on making campus life an important aspect of being a student and increase staff salaries. Thus, one can engage the poor learning environment.

Many of these criticisms and recommendations are thoroughly used in this study in the problem recognition chapter. Additionally, the research method King (2013) used was employed in this thesis, to gain a better understanding of how things might have changed and get a better overview than simply looking at the literature. Thus, the data gathering process encompassed interviews with stakeholders and university students.

The last key literature used in the thesis, is that of Hayden & Martin (2013) entitled '*Recovery of the Education System in Myanmar*'. The article, published in the journal of International and

Comparative Education, aims to systematically document education in its current state in Myanmar. It is researched by interviews of actors in the sector, such as students, education managers, and teachers between 2011 and 2013. The education system was at this time in rapid change, pertaining to the NLD coming to power. It was also around this time foreigners were given access to data regarding the education sector. The article also draws on literature from government reports. By doing this the article shows the challenges facing a weakened education system, in considerable need of reform, more financial resources, teacher training, and cultural change in the learning environment.

The document in astoundingly comprehensive, and highly relevant to this study. While its content might cover 2011-13, it seems highly applicable to the more current literature, which rarely if at all contend differently from the information given in Hayden & Martin (2013). It is also often cited among other Myanmar education and TVET literature. Consequentially, it is used often in this thesis.

This study is thus a continuation of the tradition of research put forward before it in relation to both Myanmar education and LAMTIB. Its research design and theories follow established and reviewed literature but moves forward by implementing new information as well as a logical continuation of the theories presented in previous literature. The study can thus be valuable as an addition to the academic discourse, as well as being a contribution to the evolution of LAMTIB.

3. Theories and Concepts

The following is a description of the theoretical and conceptional framework used in this thesis. To be used effectively, definition of key theories and terms must be made. Some have contradicting or contentious definitions in literature, and others are original in their use to this thesis. The chapter is split into two, depending on which are used as a theoretical aspect in the thesis, and which help conceptualise it in the greater discourse. The definitions will mostly follow common use in Norway, as well as its definitions using United Nations (UN) texts where available.

3.1.   Theoretical Framework

The theoretical framework has four elements, which all work in an enabling nature on different levels of the analysis. Firstly, the decision-making model is used as the general theoretical framework for the thesis. Thus, it keeps a business research perspective. By using this the thesis has a basis which always return to the main issue at hand: how can we best implement education and TVET on the local level in Myanmar?

Secondly, the cycle of poverty theory will be presented and discussed. The theory is referenced often in the thesis and is used to understand the reasons LAMTIB should focus on education and TVET. Further, it will also give an understanding of how other initiatives and businesses who work with development view the issue of education and development, such as UNESCO. The theory will also be used gauge the initiatives impact. The third theory used is globalisation, the buzzword which is hard to escape when dealing with a country in change such as Myanmar.

Fourthly, a theory of how such initiatives should be implemented is presented: precedent. By using evidence from literature found in implementation of similar development projects, the subchapter hopes to show that there is a need for a theoretical discourse in how one uses available resources for effective implementation in regions. Particularly if these regions are of an unknown or foreign nature to those wishing to give aid, development building, crisis relief, or even businesses. It will discuss different development initiatives which have had varying degrees of success, and how LAMTIB and other Initiatives might learn from this when wishing to launch a project.

3.1.1. Decision-making

The decision-making framework is proposed in Davis (1996, p. 4), where he describes how decision-making might be done in a management and business setting. It is described how decisions pertaining to strategy and implementation are unstructured in nature, meaning that

there is much uncertainty and external, future-oriented information is needed to develop it (Davis, 1996). As such, the thesis is structured so that information is gathered and analysed from the external and with the perspective of finding how this information could help implementation of the Initiative.

In order to do this Davis (1996) presents a framework on how management and researchers might observe the information, and so how the decision-making process is made. This process is in this thesis translated to parts, attempting to encompass the process throughout. Specifically it is argued that the five main stages of the process are: problem recognition, information search, problem analysis, alternative evaluation, and finally a decision (Davis, 1996). The process can be found illustrated in figure 2.
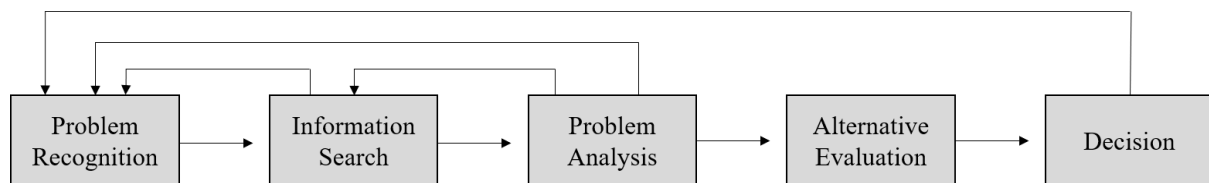
Figure 2: The decision-making process (Davis, 1996).

The first stage is problem recognition, where management or otherwise become aware of a problem which exists now or in the future. In this stage the environment of the problem is analysed; what the opportunities or problems are with the situation should be identified. A strategy of engagement of the problem should be made (Davis, 1996). For the thesis, this describes the initial chapters – the context for the study. The 'problem' or research questions aims to answer the title of the thesis, but first the environment of the problem must be made clear: introduction, context, theories, concepts and methodology.

The second stage of information search is considerable for the subsequent stages. This is where information pertaining to the problem is found and presented. The information found might change the problem and/or opportunity parameters (Davis, 1996). In this paper the information search stage can be described as the literature analysis, where more depth is given to the specific issues at hand: Myanmar, education and TVET.

Thirdly, the problem analysis: information about the issue has been gathered, and it is time to analyse how to approach it from the standpoint of the individual enterprise. At this point the information should show the issues which the enterprise might find most concerning, and what factors might contribute to it (Davis, 1996). This falls into the addition of the primary sources

and observations made in the field, to the analysis. Here we find how the local communities' understanding of the situation corresponds to the literature found in the information search stage. Thus, we find the concerns most needed to address for LAMTIB and other enterprises wishing to implement education and TVET in Myanmar.

The alternative evaluation is described to encompass alternative courses of action which are given by the initial criteria for the process. Thus one can discuss the alternatives which might be possible either because or despite the research done in the earlier stages (Davis, 1996). Here the thesis wishes to analyse how the proposed issues might be affected by a LAMTIB initiative, and further, how it might affect development, as well SDG impact. It will do this by analysing the data within an operationalised precedent model, followed by an analysis of the Initiative's effect on the cycle of poverty, before finally a discussion of its fulfilment of SDG 4. Thus, rather than presenting direct alternatives to an issue, the thesis will understand alternative evaluation as an evaluation of the information, or a discussion chapter.

Decision making is straightforward as a step in this process and is described as the '*selection of an alternative to address the problem identified*' (Davis, 1996, p. 7). As the thesis is indeed an academic paper, and not management in an enterprise, the thesis will use this opportunity to give recommendations for how such a decision could have been made. It will also consider the limitations of the study.

Consequentially the thesis will use the framework actively, and thus ensure that the thesis has a *business research* approach at its core. Business research is defined by Davies (1996, p. 9) as '*systematic, controlled, empirical, and critical investigation of phenomena of interest to managerial decision makers*'. This will again ensure that it will help the evolution of the LAMTIB Initiative hold value to actors which might want to replicate or use this approach later.

Using this framework will also allow the thesis to have a, as described in Adger et al. 'thick description', by combining the theoretical and methodological traditions of different discourses. This framework gives the opportunity of using not just business research, but also development theories, as well as qualitative methodology from the human geography tradition. This way, one avoids two pitfalls: simply 'cataloguing' a culture, and the theoretical results to be overgeneralised universalist theory (Adger et al., 2003). Thus, one can generalise in such a way that shows patterns, characterising a certain moment in a certain context.

3.1.2. Cycle of Poverty

It is hard to visualise the impact of poverty on our world, even today. 10.7% of the worlds' population live in poverty, according to the newest accessible estimates (World Bank Group, 2018). These numbers showed a positive decline from 12.4% in 2012, and even more so from 35% in 1990. Thus, nearly 1.1 billion people have moved out of extreme poverty since 1990 (World Bank Group, 2018). Even so, 10.7% is an incredibly high number, and if the SDGs will be achieved by 2030, the trend must continue. The largest regions where poverty has been reduced are in East, South and Pacific Asia (World Bank Group, 2018).

It is therefore essential to find why poverty continues despite international development, and what we can do to prevent its continuation. A theory used frequently in UN literature, especially UNESCO, is that of the cycle of poverty. Unfortunately the theory is rarely described, and so in order to make it more than a popular buzzword, it must be defined . The thesis will not use the long criticised economic theory known as the "vicious circle of poverty", but rather the sociocultural theory used by UNESCO (Economist, 2002).

Sheerin et al. (2015) describes the cycle of poverty as the explanation for how individuals and families could experience several generations in poverty. It is described as generally being in a situation where the resources to exit poverty is not available to them. This could be irrelevant skillsets, low education, or a need for financial capital (Sheerin, Cooney, & Hughes, 2015).

These unsatisfied needs are divided into stages of life, which cyclically enable each other so that one is '*trapped*' in an '*infinite circle'* (WSU, 2017). The stages are: growing up in poverty, which leads to being disadvantaged in attainment of education and skills, which again limits ones' employment opportunities or even unemployment, from which one experiences poverty or low pay in early adulthood (see figure 3). Finally, those who find themselves in this situation starts a family, and again the circle returns to its first stage (WSU, 2017).
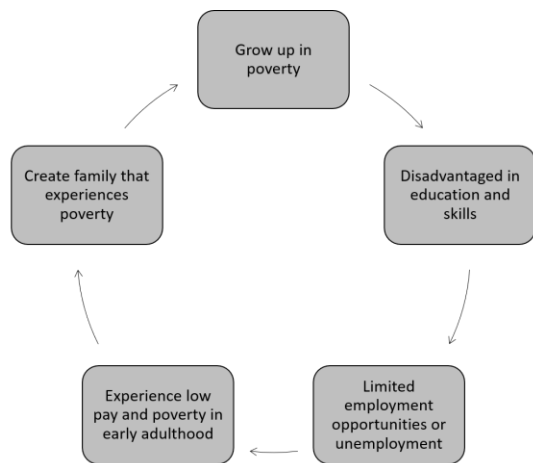
Figure 3: The cycle of poverty (WSU, 2017).

Consequentially, the next step is finding how one can break this cycle. There are many different approaches internationally. These range from financial aid programs such as food stamps and tax relief for low-income households, to healthcare initiatives and funding for youth programs (WSU, 2017). For this thesis, however, we shall focus on the education aspect of the cycle.

Education and the cycle of poverty

> *'Education is the key that will allow many other Sustainable Development Goals (SDGs) to be achieved. When people are able to get quality education they can break from the cycle of poverty'* (UN, 2017, p. 1).

In much UN literature there is an emphasis on preventing the cycle of poverty from continuing, as well as the great importance of education on this very cycle. In fact, quality education is described as '*the foundation to improving people's lives and sustainable development'* (UN Web Services Section, 2018). UNESCO is the main UN affiliate who has committed to realising the ambitions put forward in SDG 4: Quality education, and who indeed argue that the only way to properly realise the others, one must acknowledge education as the main driver for development in the world (UNESCO et al., 2015). Education as a development strategy, and its opportunities can be found illustrated in figure 4.

They argue that education has an empowering function ensuring a reduction of inequality, helps in obtaining decent work, has positive effects on gender equality, raises wages, generates productivity, and that more educated people tend to live more healthy and sustainably (UN, 2017; UNESCO et al., 2015). It is also argued that education ensures higher participation in civil society and a less violent community (Global Education First Initiative, 2014). There is also an environmental aspect of education, where better information about the environment will

ensure better awareness of the issues, as well as how one can then implement technological solutions to climate changes and heighten agriculture productivity (Global Education First Initiative, 2014). Consequentially, it is argued that if measures such as ensuring that populations of low-income countries achieved basic literacy, 171 million people could have counteracted poverty (Global Education First Initiative, 2014).

These claims are grounded in several studies looking at different aspects of education and society. Using data from 1985-2005, one can see that only adding one year of education reduces the Gini coefficient by 1.4% (UN, 2017). For women, another year of school can give an increase of 10% to ones' wages, and estimates suggest countries would gain US$1 billion a year if they educated women as they do men. Further, when given access to secondary education, women have a higher chance of knowing how to family plan, keep from transmitting HIV, as well as being then more likely to take vaccines, such as tuberculosis (Global Education First Initiative, 2014).

For low-income countries, it could give as much as a 2% growth annually to state finance to educate all children in their countries (Global Education First Initiative, 2014). Perhaps most staggering, is a study which found that 4 million children worldwide had been saved from early deaths, because of health education given to parents who might otherwise have received none (Global Education First Initiative, 2014).

The attainment of education is thus itself argued to be a catalyst to leave the trap of poverty. This because of its far-reaching effects in many aspects of human quality of life. Consequentially, we can see that education as a development strategy is particularly effective for its proxy effects. As Tin et al. describes it, the basic theory is that '*the better education a population, the healthier the population will be and the better developed the country will become*' (Tin et al., 2008, p. 127).
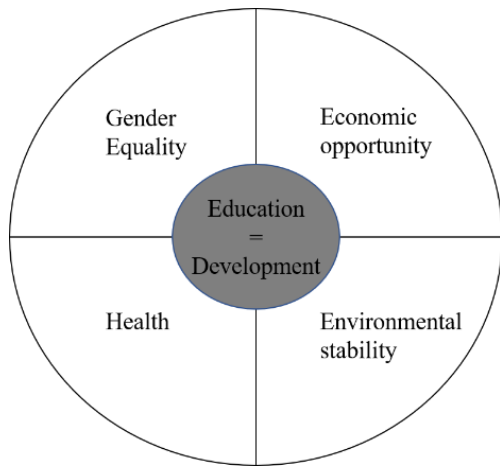
Figure 4: Opportunities of education as a development strategy (Global Education First Initiative, 2014).

Critique of the theory: Risk and the cycle of poverty

Having been so accepted by the UN, it is not surprising that the cycle of poverty theory has been part of development discourse since after world war 2 (Economist, 2002). Particularly, it was the development economics theory mentioned above which came to theoretical hegemony regarding policymaking for lower-income countries. Institutions like the World Bank subscribed to this view, which promoted the idea that poorer countries are stuck in an infinite circle, simply because they did not have the financial capital to invest and thus generate economic growth. The answer became that of foreign aid, trade restrictions and monopoly rights (Economist, 2002).

It was the trade liberalisation discourse which critiqued the approach (Economist, 2002). This because market forces, which would otherwise allow economic growth, were not allowed to function naturally under these policies. Today, it is still a contended discussion in development discourse to what extent exactly one should follow either direction, but conventional understanding has accepted that the environment for a market to flourish must be made before development happens (Economist, 2002).

Transferring this critique to the sociocultural aspects of the circle of poverty, is that of Mosley & Verschoor (2005). They question the discourses' tendency to argue that '*people are unable to take the actions which will extract them from poverty because they are poor*' (Mosley & Verschoor, 2005, p. 3). They propose that to most households and individuals in lower-income countries, it is important to include the '*risk aversion*' factor into the cycle.

To them, rather than focusing on peoples 'inability' to leave poverty, one should consider the fact that to many there is a survival risk involved with investing time and resources into mechanisms which might let one leave the cycle. Those who are not in a position to take such risks through a lack of human, physical or social capital, will stay in the cycle. On the other hand, if one is able or even willing to take such risks one will be able to escape (Mosley & Verschoor, 2005).

Therefore, one should discuss '*attitudes to risk*' rather than '*ability to manage risk*', as is commonplace in the discourse (Mosley & Verschoor, 2005). The choice of investment in such things as education, new technology, or land, might seem to a household as too great a risk for its return profit (Mosley & Verschoor, 2005). The *inability* of inability to manage risk is therefore part of a '*finely balanced survival algorithm*', not incompetence or ineptitude (Mosley & Verschoor, 2005). Consequentially, we can see that there is again created a cyclical relationship between poverty and the inability to manage risk (see figure 5).
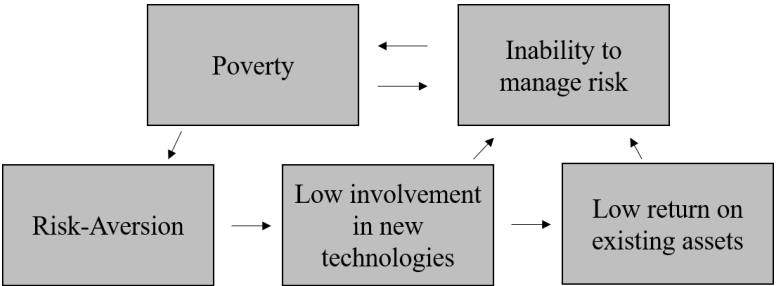
Figure 5: 'Vicious circles of poverty' based on risk-aversion and inability to manage risk (Mosley & Verschoor, 2005).

3.1.3. Globalisation

A key theoretical discourse in today's world, is that of globalisation. Although it is debated to have begun everywhere from centuries ago, to the last few decades, it was in the 1990s it truly found its popularity (J. Clapp & Dauvergne, 2011; Hallak & Poisson, 2000). As a polarising issue, it provoked a variety of responses; either it was the great equaliser between nations, or the beginning of the end for global society (Greig, Hulme, & Turner, 2007). Today, one finds another growing critique which questions whether the word even has a meaning anymore (J. Clapp & Dauvergne, 2011).

However, no matter which camp one finds oneself, it is hard to deny its vast effects on human society. In 2011, approximately US$3 trillion in foreign currency was traded every day, which

is nearly twice as much as the 1990s (J. Clapp & Dauvergne, 2011). In fact, for many low-income countries, it has become an essential part of their development strategy (Swe, 2015).

The process itself has been described by many, in many ways, but common denominators tend to be an international (or global) flow of capital. The capital can be in close to any form: human capital, financial, ideological, knowledge, technological, ideas, social, and cultural, to mention some (Swe, 2015). This capital flow creates a complex process of many dimensions, both domestic and international, which structures and integrates economies, civil societies, and institutions all over the world (J. Clapp & Dauvergne, 2011).

Those in lower-income countries, Swe (2015, p. 30) argues, partake in this process because they find themselves in the great equaliser camp - they believe it will reduce poverty levels (Swe, 2015). This participation usually means deregulation of trade tariffs, and promoting communication, transportation, and trade across borders (Greig et al., 2007). A particularly affluent example is the incredible interconnectedness created by the internet (Greig et al., 2007).

Hallak & Poisson (2000, p. 10) describes four key factors on why globalisation has been so accelerated in recent decades. These are: geopolitical changes, a dominant ideology of regulation by market forces, fast and significant technological progress, and increasing return on capital investment.

The geopolitical changes have their roots in the weakening power of the nation state, sovereignty is frequently transferred to higher institutions, such as the European Union (EU) or The Association of Southeast Asian Nations (ASEAN). The current dominant ideology on regulation of market forces is one of deregulation, financial and economic markets are in an environment of interdependence. Technological progress has ensured direct and instant access to most everyone who has access to a smartphone, which again enables them to communicate information at any place or time. Capital investments now gain higher returns than before, as one has a larger market to spend said capital, an near infinite market for production and industry means that goods and services are available like never before (Hallak & Poisson, 2000). All these factors contribute to further accelerate the globalisation process.

The globalisation process also has considerable effects on the education sector, both for those with access to the global markets, and those without. Hallak & Poisson (2000) again found three key phenomena which globalisation has affected: the emergence of learning societies, transformation of the nature of work, and the progression of social exclusion. Learning societies have formed because of the wealth of information and resources available, while the nature of

work has become more flexible and mobile. Social exclusion describes the many people who do not have access to the technological and information sharing, leaving them behind in a rapidly changing world (Hallak & Poisson, 2000).

Consequentially, Hallak & Poisson further argue, that there are several challenges which education faces in a swiftly globalising world. They find three key challenges: a need for rethinking how one delivers content and integrate new information sources, one also needs to develop skills as well as knowledge in schools, and a need to adapt curricula to different groups in society while keeping national and social cohesion (Hallak & Poisson, 2000).

3.1.4. Precedent

It is a common aspect of western law, however, it should also be a common aspect of the decision-making process, for the very same reasons. To show the need of a continuation of a theoretical discourse on this concept, the thesis will in the following explore how the inclusion of precedent could help some deficiencies in today's operation of developmental aid. While this thesis will introduce this concept, the scope of the thesis does not allow a complete analysis of it, therefore it can be seen more as an introduction and suggestion for future academic work, in this regard.

These are three deficient aspects of the decision-making process which would gain from implementing precedent as a concept; a lack of understanding contextual precedent, considering the ethical aspects of sociocultural precedent, and not addressing the actual but rather the assumed needs of a population. Only by including these, can one ensure an implementation which is holistic, case oriented, and promotes sustainable initiatives.

Definition

The term is originally used to describe a process of law and in some cases government. The definition is defined in Cambridge Dictionary (2018) as having three key aspects: Firstly, a decision, action or situation which has happened, could be used to reason for future decision-making. Secondly, there is an assumption in that how something has been done in the past, might also be the correct way in the present. Thirdly, how a decision has been made, makes it more likely that similar cases will give the same decision, and have the same results (Dictionary, 2018). The Gale Group (2008) further argues that the use of precedent ensures stability, fairness, predictability and efficiency in terms of law.

To translate these aspects into a decision-making framework, we can use much of the same definitions, with slight changes to meanings in context. Firstly, a decision, initiative or business plan should investigate how previous such actions were made in the respective geographical, area, time, and culture of the place it wishes to implement said action. Thus, one can have an idea of what worked, what lessons were learned, and so ensure an educated information search, and later decision.

Secondly, working on the assumption that what has worked in the respective area, time and culture will continue to work in the future, means adjusting oneself to the respective case, rather than implementing overarching ideas which might not consider the specific niches of the case. One caveat here, though, is the fact that cases are ever changing spaces, and should be considered as such when one works on a plan.

Thirdly, by following the logic of previous decisions, one can see how similar situations might be made different, and further what kind of results one can expect post-decision. Consequentially, we can produce a decision-making process which is stable, efficient and predictable for management, but also fair in its attitude towards the case. One can then see how valuable such a process would be for a decision-making process which involves people, particularly in low-income countries.

Precedent in current literature

On an operational level one sees that there is a recognition of a need to make aid and developmental initiatives more effective (OECD, 2005). If one looks at international work on the subject of aid efficiency, most notably the Paris Declaration on Aid Effectiveness of 2005 and the Accra Agenda for Action of 2008, we see that precedent is laced throughout their wording. In the Paris Declaration (2005), there is focus given to the need to '*harmonise and align aid delivery*'. To do this, it is declared that partner countries must have strong strategies and frameworks for development, and that those providing aid must adhere to these strategies by aligning with the countries' systems, procedures and priorities, and thus strengthen their capacity for development. It is also noted that there is a need to increase donors and partner countries accountability to their citizenship as part of policymaking and development performance. Notably, it is argued that there is a problem with '*duplication of efforts*', which must be dealt with so as to encourage cooperation and cost-efficiency (OECD, 2005, p. 1).

Generally, throughout the document, it is referenced several times the need to adjust to a countries own development strategy, but also a commitment to understanding how each individual country is unique in its approach to it (OECD, 2005). The partner countries should, according to the declaration, have a consultancy capacity to its donors, ensuring that the niches of each country is represented in aid initiatives. By doing this, it is argued that plans for aid in partner countries will have more desired results, and that adhering to these principles will advance decision-making (OECD, 2005).

To operationalise these declarations for the decision-making process, the concept of precedent would be invaluable. There is clearly recognition of the fact that initiatives which hope to encourage development, negate the cycle of poverty, and generally help achieve the SDGs, can have issues of not looking at the resources and initiatives already in place. Simply giving financial funds as aid has been proven to be ill-conceived - without the environment for economic growth, such funds tend to not be spent effectively (Economist, 2002).

Contextual precedent

McCord, Simon & Weil (2013) argue that to ensure cooperation in education initiatives, contextual issues must be considered in implementation. Issues such as the centralisation of bureaucracy, the educational context, if the country lacks the ability to build international ties, social capital issues, as well as the political context of the country, are essential factors needed to be understood (McCord, Simon, & Weil, 2013). By understanding these contextual issues, one can better ascertain the strengths, opportunities and problems in how potential decision paths might result.

This should be noted not just as a macro, or overarching contextual history survey, but rather an understanding of the contextual precedent on the macro, mezzo and micro level. These contextual issues could easily be addressed by making it a priority in the first stages of the decision-making process to take the history of the region, time, people, and culture, seriously (UNESCO et al., 2015). In this thesis, these contextual precedence's have been investigated by looking at broad trends in literature and interviews of key personnel in education of country wide organisations on the macro level. On the mezzo level, interviews were done with local key personnel both in education and local businesses at the LAMTIB launch site. To also ensure the micro perspective, local students at different stages of their studies were interviewed.

Sociocultural precedent

Another issue which should be considered, are the ethical and operational elements of the culture of a place. The Businesses of a Better World (2016) problematize the garment industry in Myanmar, and how foreign businesses have dealt with the sector. There is a long-standing problem of child labour in Myanmar, meaning that for foreign business who might stand at risk of a publicity scandal, might shy away from using domestic suppliers. The result is that foreign businesses will most likely work with other, established, foreign business in Myanmar, who presumably adhere to international law – requiring their workers to be 16 or 18. This kind of 'bubble' industry thus creates a barrier between foreign business, and domestic (The Businesses of a Better World, 2016). This kind of bubble might be prevented by foreign enterprises, if they are willing to investigate further into the local sociocultural behaviour and find suppliers willing to adhere to international standards.

The sociocultural aspects of a place are also important in understanding what kind of knowledge and development would be seen as valuable. As Stephens et al. (2008, p. 324) argue, '*challenges manifest in very different ways in different places*'. They use the example of university research on climate change, where a university in Bangladesh might find it extremely valuable to research solutions to migration as a result of flooding, while in high per capita consumption countries like the USA or Japan, might find very different solutions to climate change in research (Stephens, Hernandez, Román, Graham, & Scholz, 2008). Consequentially, one should look at these broader contextual issues as presented earlier, as part of a sociocultural understanding of what the most immediate needs are.

In this thesis, the sociocultural precedent is key, because of the LAMTIB Initiative's inherent outsider status. Only by understanding the sociocultural aspects of the launch site, will the Initiative be able to implement itself effectively. Learning from the garment industry, the Initiative must be able to avoid both the foreign-to-foreign business bubble, and how to use the local environment sustainably and fairly. If the Initiative follows 'business as usual' at the launch site, there will be little real effect from it. Thus, meaning that one must be aware of what is the situation currently, how have others tried to change it, how do the locals think one can best change for the better, and so implement this information.

Real needs

The third aspect of precedent is that we must better ascertain what the real needs of a community is, rather than those which could be assumed by outsiders of the case. Aunemo (2015) also

problematize this in her thesis, where she asks how one can define the needs of a population, and what to do if these needs are diverging or contradictory to each other.

In her fieldwork, the community of LAMTIBs site in Santa Cruz asked if solar-chargeable walkie-talkies could become part of the Initiatives implementation in the community (Aunemo, 2015). However, these technologies are hardly 'leapfrogging', and it would not connect the population to the outside world one a broader scale. Thus, it is outside the LAMTIB Initiatives parameters.

It was therefore clear that clear goals and cooperation with the local community would be necessary to implement the Initiative successfully, while asking how one can unite these needs and operational goals (Aunemo, 2015). Additionally, as Aunemo (2015) points out, this experience also shows the at times problematic intricacy of what one *needs* versus what one *wants*. As she points out, it is common for businesses to make the mistake of only adhering to one of these, rather than combining them (Aunemo, 2015).

There are therefore needs at three levels which must be made clear: *needs for development* such as access to value chains and technology, *wants for growth* from the case population such as walkie-talkies or other quality of life effects, and finally the needs or scope of the Initiative, such as the need for all aspects to ensure fulfilment of key goals. These can be described as the 'real needs' of a case. To ensure positive results, one must consider all these so that the stakeholders in the Initiative are invested members.

A practical example of a situation where the need for all three aspects of precedent was very clear, is that of Smith (2016).

Empirical evidence

Smith (2016) describes the New Education Highway project in Myanmar, an educational and technology project which hoped to give more advanced educational material to local communities. In the beginning, as Smith describes it, New Education Highway were handing '*out laptops containing a vast wealth of information as though they were pieces of candy to be chewed over and spat away'* (Smith, 2016). These laptops included access to everything from a full primary education curriculum, higher education level tutoring, and both open access and donated copyright material. The laptops were installed in community learning centres, with free access (Smith, 2016).

Despite the content, they quickly found a disconnect between the technology, and student improvement. They found that '*the problem we encountered was that no-one really knew how to use this material to teach*' (Smith, 2016). Additionally, although the problem was attempted solved through seminars with local teachers on how one could use the material, they found that '*teachers were unable to comprehend the new active learning plans*' – the material was simply too dissimilar to common practice, and so, incomprehensible as an operational curriculum (Smith, 2016).

This, in combination with the 'yes' culture of Myanmar, where criticism is rare and feedback sporadic, the results were such that the New Education Highway were not aware of the seriousness of the problems until months later. It was not until they arrived in person they found that the laptops were dusty and broken, with the seminars having little to no effect in the classrooms. It was not until they took a more one-on-one approach, asking teacher directly how to improve the quality of education, that they saw results (Smith, 2016).

The precedent model

Thus, we have found three aspects which would be helpful for the decision-making process if one were to implement precedent as a concept. Contextual and sociocultural precedent would be helpful both in understanding what opportunities and problems associated with a case. Identifying the real needs, would further ensure investment from the stakeholders. Thus, we can ensure a more stable, efficient, predictable, and most of all fair process involving the case on its own terms, rather than as a general place 'in need of development'.

All in consideration, it seems evident that the concept of precedent should be quite influential in how one can implement education and TVET on the local level in Myanmar. By using the theory as developed in figure 6, the thesis ensures that information is given in precedented context. Thus, much of the information gathered as part of the decision-making process framework, is done so in order to establish what precedence exists in society at the launch site, and how this can be used to better implement the LAMTIB Initiative. It has guided the interview questions, as well as the aspects which will be analysed in the discussion.
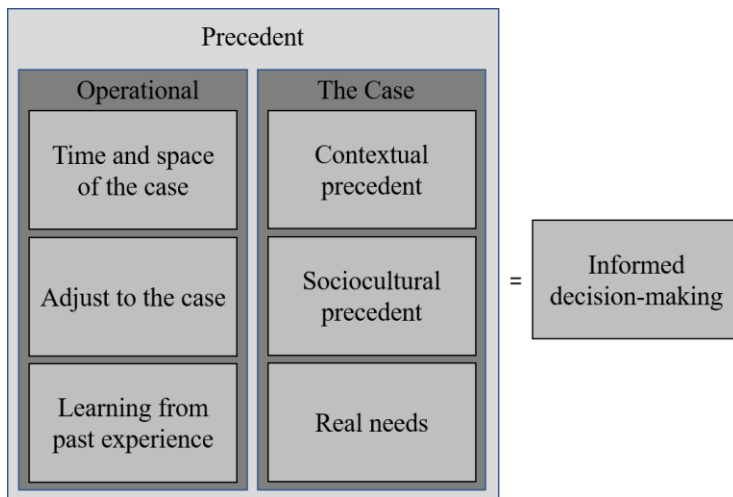
Figure 6: Precedent as theoretical structure for the decision-making process.

3.2.   Concepts

The conceptional framework for this thesis is developed to define the abstract terms used throughout it, and thus create an understanding of how the thesis will use these concepts. By doing this, the thesis will also give an understanding of how it fits into the greater conceptual discourse of these concepts. Particularly, the concepts regarding education will be developed, specifically the concept of quality education. To understand the concept, SDG 4 and its targets will be presented, as well as how one can define 'quality' education, the definition of lifelong learning, and the definition of TVET. Further, the framework will develop the concepts of development, and how it is understood in different discourses. Lastly, the concept of sustainability will be discussed, and how it relates to the thesis.

3.2.1. Quality Education

The Sustainable Development Goals (SDGs) were created in 2015 as a continuation and update to the Millennium Development Goals (MDGs). These goals had as their aim to create a more people-centred approach to development, and the result was 17 new goals to be reached by 2030 (UNDP, 2018). Goal number 4 focuses on education, specifically, quality education. Its defined goal states: '[To e]*nsure inclusive and quality education for all and promote lifelong learning'* (UN, 2017). Additionally, 9 targets, found in table 2, were created for the attainment of the goal. Since the implementation of the MDGs began, there have been made great strides in ensuring that all have access to education in every level. Particularly we can see that basic literacy has grown immensely (UN Web Services Section, 2018).

The goal of quality education for all has been given attention as part of the increasing recognition of its importance. As the goal which will ensure the success of all the others, it is important to understand who are its driving forces (UNESCO et al., 2015).

It was UNESCO which was given the mandated role of leader and coordinator for the Education 2030 agenda, by political advocation, facilitate dialogue around policies, sharing knowledge and standards, monitoring the progress of the targets, as well as convening stakeholders in all levels in order to guide implementation (UNESCO et al., 2015). UNESCO thus continued the '*holistic and humanistic vision*' which the SDGs presented, making clear that instead of a utilitarian approach to education, the SDG 4 agenda would integrate '*the multiple dimensions of human existence*' (UNESCO et al., 2015, p. 26).

The organisation created in cooperation with several stakeholders, such as UNICEF, The World Bank, UNFPA, UNDP, UN Women, and UNHCR, the Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4. Further, a description of indicators in order to monitor progress was created as Annex 11 of the Declaration (UNESCO et al., 2015, p. 26).

Table 2: SDG 4 Targets (UN Web Services Section, 2018).

No.	SDG 4 Target
1	By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and Goal-4 effective learning outcomes
2	By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
4	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
5	By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
6	By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
7	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
8	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environments for all
9	By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
10	By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states

'Quality'

It is important to define what is meant by 'quality' education, as it might be different depending on ones' understanding of the word. UNESCO defines this in the Incheon Declaration as education which '*lead to relevant, equitable and effective learning outcomes at all levels and in all settings*' (UNESCO et al., 2015, p. 30). Thus, teaching methods need to accommodate all learners, using different pedagogical approaches, and teachers need to be trained, motivated and well-qualified. Teachers have a special place in education, and are often highlighted for their importance (UNESCO et al., 2015). Generally, the stakeholders of the Incheon Declaration emphasised the need to empower teachers through support, training and recruitment. Further, there is emphasis on the establishment of a safe environment which is inclusive, with adequate resources and is health focused (UNESCO et al., 2015).

The bare minimum is argued to be basic literacy and numeracy as building blocks for '*higher-order skills*'. These include analytical know-how, creative thinking, problem solving, interpersonal and social skills, as well as critical thinking. Further, education is value and attitude generating, which leads to an engaged civil society ready for the global challenges the SDGs highlight (UNESCO et al., 2015, p. 8).

Lifelong learning

Continuing the SDGs holistic approach, the concept of lifelong learning has become increasingly popular. The concept bases itself on integrating aspects of real-life or 'living' with that of learning. A person learns throughout their life in different arenas, acquiring different skills. These might be highly differing from the demands of the situation which the person is confronted with in the future. Therefore, a person must continue to learn throughout their life (UNESCO, 2013a). The concept is closely connected to that of life skills, which refers to skills one needs to live independently and healthily in a person's given situation. Thus, importance is placed on defining education not as belonging to an elite or age group, but rather on the attainment of skills needed, for all (UNESCO, 2013a).

The Delors Report in 1996 argued that lifelong learning is defined by four pillars: '*learning to be, learning to know, learning to do and learning to live together*' (UNESCO, 2013a). Thus, it is a collective approach to education, which aims to include all ages, life contexts, and modalities. The importance of lifelong learning has been made clearer by globalisation, through which value of skills can be more clearly understood as in fluctuation (UNESCO, 2013a).

TVET

A branch off from lifelong learning is the concept of TVET, which has been argued to be an important aspect of implementing the SDG 4 framework into society. It is the recognition that formal schooling is not the only way one can acquire life skills, or valuable knowledge for the future (UNESCO et al., 2015). Also in terms of tertiary schooling UNESCO argues that TVET is essential to prepare for a globalised world; graduates must adapt to a quickly changing labour market with demands for both cognitive and non-cognitive skills, where concepts like critical thinking, communication and creativity will be as important as a degree (UNESCO et al., 2015).

The thesis follows the definition put forward in Tanaka, Spohr & D'Amico (2015). TVET can encompass a range of courses, from short-term training to more advanced vocational programs. It can thus be training on the job for an industrial project or reaching trying technical

qualifications. The term can also be defined by the fact that higher education is defined as bachelor's degrees and higher, while TVET does not require such a distinction (Tanaka, Spohr, & D'Amico, 2015).

TVET is important for countries who wish to improve on their sustainable growth, as it can help diversify exports and heighten the quality of products exported. It also, the ILO argues, makes it easier for countries to absorb new technologies, and thus give competitive advantage. Further, it could help job creation and innovation (ILO, 2010). TVET skill training is often available in industry very important to development and the economic environment of developing nations, such as oil, gas and value-adding for the agricultural sector (Oxford Business Group, 2018c). TVET is also essential to prevent the problem which many developing countries are facing, of skills mismatch. There is a trend showing that traditional education is not giving people the skills needed to face todays labour market, leading to youth unemployment (ILO, 2010).

However, it is recognised that there are many barriers to attaining TVET, especially in developing countries. One such barriers is perception, as TVET has been found in a 2016 report to be associated with failing academically, and a 'low status' option rather than its own meaningful path (Oxford Business Group, 2018c). Statistics from 2013 show that only 23% of students in upper secondary education enrolled in TVET globally (UNESCO et al., 2015). Efforts to change this perception has focused on introducing TVET as apprenticeship style training courses, and on-the-job training. (Oxford Business Group, 2018c). Consequentially, it is argued that greater emphasis must be put in the contribution of informal schooling, training, and establish flexible pathways for learning (UNESCO et al., 2015).

3.2.2. Development

As a concept, development is highly contentious in literature. Depending on one's theoretical standpoint, it can have varied meanings, and there are discourses which hold that the term itself is not helpful to understanding the experiences it is trying to describe (Greig et al., 2007). As the concept has been used already many times in this thesis, it is clearly important to define what exactly is meant when the thesis discuss development.

The 'development project' began after World War 2, rising from the ashes nourished by optimism upon the wars conclusion. At this point, there was an assumption that the Western capitalist countries were at the end of their development, meaning that the source of the ills was with the 'developing' countries, which had yet to reach the wealth and industrial society of the

West. At the heart of this assumption and, Grieg et al (2007) argues, the theories to come, was the chase for progress and modernity.

Progress and modernity have been part of the development project since its initiation, although it has been under more scrutiny in later years in social science. The path towards them has been argued as linear, one which all countries are on and wish to continue down (Greig et al., 2007). The significant theorists within development theory are named to be Weber, Durkheim, Simmel, Marx, and Spencer. However, while their approach to development differed dramatically, they all continued the established development theory as a linear one. A country was thus at all times in progress towards a different stage in development (Greig et al., 2007). Karl Marx himself writes in the preface of *Capital*, Volume 1: '*the country that is more developed industrially only shows, to the less developed, the image of its own future'* (Marx, 1867).

Modernity and progress is thus synonymous with European modernity. Even though some of the theorists mentioned would do work in non-Western countries, they would continually use the European, Western society as a '*yardstick*' by which to measure these countries, which were seen as '*other*' or outside the norm (Greig et al., 2007, p. 58). However, today, we see that the Western world has itself evolved, experienced significant changes in its economy, as well as increasing inequality and social unrest. Being more 'industrial' has not made them immune to the changes of a globalised world (Greig et al., 2007).

There is also the issue of significant environmental risk; if those in lower-income countries were to develop as the Western countries did, it would simply be impossible for the planet to sustain itself in a manner which would allow human life. The chase for development has thus become not an ubiquitous answer, but an issue in itself (Greig et al., 2007).

The MDGs and more recently the SDGs aimed to create a more holistic and people-oriented approach to development. They hoped to create a framework which allowed the partner countries to enable an end to such issues as hunger, poverty, and access to education. The SDGs have recommendations to nations on how to achieve these, if in the West or elsewhere (UNDP, 2018).

Development is thus a concept which has changed significantly since it found its popularity after World War 2, and the thesis' understanding of it is reflected by this. Development will be understood as by the UN in the SDGs – a process which need to reflect the needs of the people.

It therefore follows closely to Tucker (1977) as quoted in Grieg et al. 'the improvement of the individual lives of the great mass of people'. (Greig et al., 2007)

3.2.3. Sustainability

Sustainability has in many ways become the 'second half' to the concept of development. While development hopes to improve people's lives, sustainability hopes to do this in such a way that we are able to sustain our existence today, as well as in the future (Jørgensen & Pedersen, 2015). The issues of sustainability tend to be more abstract, and one might find it more difficult to emphasise, as we cannot 'feel' deforestation, but we can sense that the climate is changing (Stephens et al., 2008).

The term sustainable development came to popularity after the Brundtland Commission, and subsequently gained traction after the Rio summit in 1992, Kyoto Protocol, and the 2015 Paris conference, to mention a few (Hjorth & Bagheri, 2006). Sustainable development means a joining of economic, societal, and environmental development to aim for a sustainable growth (Hjorth & Bagheri, 2006). It means being sure to evaluate also the environmental cost of ones' policies and strategies, and how the ecosystem is key to livelihoods and financial stability.

If one thus wishes to go down a path of sustainable development, one must consider how nature and society interact (Hjorth & Bagheri, 2006). Consequentially, the sustainability process must be seen as a continuing one, which continually changes its goalposts and is not something to 'reach' (Hjorth & Bagheri, 2006). It is also important to actualise sustainable development as a borderless project, holistically integrated in regional discussions (Hjorth & Bagheri, 2006).

For businesses, this means implementing sustainable business models, which means that the companies environmental and social effects are considered integral to how the company operates on all levels (Jørgensen & Pedersen, 2015). Today, most businesses will have seen the economic opportunities found in implementing such a business model. In fact, the ILO argues for this as an opportunity for job creation (Bowers et al., 2013).

One can clearly see the need for the sustainable development framework, as did the UN in its creation of the SDGs. The changes made to the environment and ecosystem today are in many cases irreversible, having great costs both financially and socially. This era of environmental change by human influence has been so devastating to nature that it has been named a new epoch, beginning in the 1800s as industrialisation began, called the Anthropocene. There is thus an immediate and considerable need for cooperation on all levels, to ensure a sustainable future (Stephens et al., 2008).

The thesis will use SDG 4 to evaluate the LAMTIB education and TVET modules sustainability. As the UN has become, through the SDGs, the organisation which 'defines' what modern development is, it only naturally follows that adhering to their targets ensure development by their definition. This evaluation can be found in section 7.3. However, sustainability as a concept will be used throughout the thesis to analyse the data.

4. Methodology

The chapter presents the methodological framework of the thesis. As a people-oriented study, basing itself in a very different culture from the researchers, it was clear that qualitative methodology would be most helpful to analyse the research questions. In order to show the methodological logic of the study, the thesis follows the methodological chapter framework found in Yin (2014) to some extent. The chapter is divided into 8 sections; 4.1 Why qualitative, 4.2 Research design, 4.3 Methodology summary, 4.4 Data collected, 4.5 Methods, 4.6 Analysis Methods, 4.7 Ethics, and finally 4.8 Limitations of the data.

4.1. Why Qualitative

The chosen methodological framework for this thesis is that of a qualitative study. While a quantitative approach might have yielded some interesting result, it was the qualitative methods which would enable the researcher to access information most efficiently. As a foreigner with little previous knowledge of Myanmar, the researcher started the process from a weakened theoretical standpoint. The study would be undermined by this lack of previous knowledge – the process of fieldwork itself enabled the researcher to understand the issues and analyse the research questions more thoroughly (Thagaard, 2013).

Additionally, cultural differences might have contributed to the questions asked in a quantitative study to be understood in a very different way from the researcher to the informants, which could be solved by creating a trust bond with the informants (Thagaard, 2013). There was also a clear trend in other literature on similar topics to use qualitative method (Galvàn, 2013; Hayden & Martin, 2013; King, 2013; Mackenzie, 2013). Thus, in order to contain sources of error to a minimum, qualitative methodology was chosen (Thagaard, 2013).

It would also be a disservice to history to not take advantage of the opening of Myanmar to foreigners. While a quantitative study might have been done from anywhere and sent to interested parties, it was only through personal contact the researcher could understand the lived experiences of a people which might otherwise never have been able to share these (Hayden & Martin, 2013). It further shows the appropriateness of qualitative methods, considering the fact that the theme of the study, education, is a highly politicised and personal topic in Myanmar (Thagaard, 2013).

To best get an understanding of education and TVET on the local level in Myanmar, the study followed the advice of Thagaard (2013) – a variety of types of data and methods are essential to get a nearer understanding of both the people and phenomenon. Further, the analysis of said

data and the principles which define the study should be clearly defined. Only by doing this will the study be one which is transferable and hold integrity. Thus, the methods, context upon which the data was collected, analysis method and results is made clear in this chapter and throughout the thesis (Thagaard, 2013).

4.2.   Research Design

The research design of the thesis is relatively complex, using a critical theory foundation and combining methods from qualitative methodology, using a decision-making theoretical framework, and case studies. By doing this, the thesis hopes to build a 'thick' understanding of the phenomena being researched, as described by Adger et al. (2003). They contend that an interdisciplinary approach, which combines theories, tools and concepts from several discourses is necessary in order to improve sustainable decision-making (Adger et al., 2003).

4.2.1. Theoretical Approach

Methodology is more than simply using methods generally connected with it, it is also necessary to understand the ontological and epistemological foundation upon which the study is built. These create a more holistic understanding of the knowledge which is being attained, both in terms of data gathered, analysis, results, and how the reader might attain it. It is essential to understand how we relate to the knowledge, as well as the strategy used to research (Patel, 2015).

The thesis uses a post-positivist, critical approach to knowledge. Post-positivism rejects the notion of objectivity found in positivist writing. As an ontology it argues that 'reality' is a mutually constructed reality between people and society, which are under constant influence of each other (Patel, 2015). These power relations ensure a socially constructed reality, meaning that epistemologically reality can be known as a construct (Patel, 2015).

Theory used should thus have a critical standpoint in terms of how society functions and is constructed, and how it could function in the future. By using a critical theoretical approach, one focus also on how the data which is gathered, stands as part of a larger construct (Thagaard, 2013). The data does therefore not only represent what the participants say of their reality, but also says something about the conditions in society. Further, these societal conditions which affect the participants understanding of their experience could be internal, external, and even the researcher themselves (Thagaard, 2013). This aspect is described by Thagaard (2013) as triple hermeneutics.

While considered its own ontological and epistemological approach, it is not uncommon for critical theory research to be of a '*constructive type'*. By this Thagaard means that there is a focus on how social relationships can be improved (Thagaard, 2013, p. 44). This makes it ideal for the thesis, particularly in combination with its emphasis on business research. The methodological goal of the thesis is thus to understand and analyse the results, so that social relationships and phenomena can be improved, and consequentially through which a business (in this instance LAMTIB) might better implement its education and TVET initiatives on the local level.

4.2.2. Validating Truth Claims

For the thesis to be up to a research standard in its design, it has followed key concepts as put forward by Thagaard (2013), and Crang & Cook (2007); a systemic approach, which is further validated by theoretical sampling, theoretical saturation, and theoretical adequacy.

Thagaard (2013) describes a systemic approach to research, as one where one has a relationship to the data which is based on reflection. When important decisions regarding the process are made, the researcher should reflect on how this affects the research design and work (Thagaard, 2013). In practice, this means that the researcher justifies the choices made in the research design on every level, from theory, research questions, data gathering, to analysis and interpretation (Thagaard, 2013). Thus, the material can be evaluated, and be explicit (Thagaard, 2013).

Crang & Cook (2007, p. 14) discuss the criticism often made by quantitative scientists, that the qualitative methods tend to be difficult to replicate, and thus, how can one ensure a rigorous, convincing, systematic and thorough research? How can one implement the fact that the data given to the researcher is not just a mirror of the world, but it is also a way for the informants to act out their understanding of it? In fact, telling their stories become the very '*means through which [the stories are] constructed'* (Crang & Cook, 2007, p. 14). In order to operationalise this theoretical underpinning, they make a case for that a qualitative study, in order to '*validate their truth claims'* must ensure that the research is theoretically sampled, theoretically saturated, and adequate (Crang & Cook, 2007, p. 14).

They argue that theoretical sampling sets a qualitative methodology apart from a '*random'* quantitative statistic (Crang & Cook, 2007). Qualitative methods gain credibility through its use of selective access to groups appropriate to the study. By having people who are or have lived through the phenomenon directly, or in other ways are concerned with it, the researcher

is able to access different perspectives and gain much more detailed experiences (Crang & Cook, 2007). One thus is not dependent on 'typicality' or 'representativeness' of the participants, but rather their positionality to the phenomenon, and the quality of the data and information they provide (Crang & Cook, 2007).

Theoretical saturation further sets qualitative and quantitative methods apart, in that it may not be necessary or practical to have as many informants as possible for a study (Crang & Cook, 2007). A higher number of participants does not mean one gets more accurate or better information, if they all relate more or less the same information about their experience of a phenomenon. As Crang & Cook (2007, p. 15) writes, '*there usually comes a point in the research process where the range of arguments which can be made concerning a particular matter has been made*'. At this point, they argue, one has met theoretical saturation of ones' informants.

To reach theoretical adequacy, however, it is essential to understand previous literature and research into the phenomenon. One must understand what the similarities, and differences are, to understand the true context of the study. This way, one can find how ones' research is situated in the broader discourse, as well as find relevant theoretical concepts. Consequentially, the researcher can claim to have done rigorous research (Crang & Cook, 2007).

4.2.3. The Case

As a case study, the thesis uses the definition of Yin (2014, p. 16): an empirical inquiry which investigates a phenomenon in depth, using its context in the real-world as a foundation. A case study, according to Yin (2014), is especially helpful when it is hard to distinguish when the context ends, and the phenomenon begins. One thus hopes to gain an understanding of a case, which one assumes requires one to understand the contextual aspects of it (Yin, 2014).

Additionally, a case study deals with phenomena which have more variables pertaining to interest, than data points. Consequentially, one needs a series of sources, with evidence which meet by triangulation method. In order to do this, it is important to gain theoretical knowledge and data from previous research, as well as gather new evidence (Yin, 2014).

The case for this thesis is the LAMTIB Initiative in Myanmar, within the context of education and TVET, in the local level of mainly Meiktila, but with data gathered also from three other regions, all considered as future launch sites. Thus the thesis has a representative case, which can be generalised using triangulation to understand the situation in Meiktila, but also in the

three other regions explored (Yangon, Dawei, Myeik) (DeLyser, Herbert, Aitken, Crang, & McDowell, 2010).

The informants were from many different walks of life, with different positions in society, and with different educational and working background. However, they all had a positionality which pertained to the case. Using a cross-sectional analysis method of the interviews and focus groups, and triangulation, the data thus shows several key aspects to the context and phenomenon previously not found in literature.

By interviewing the informants, and using observation, focus groups, and fieldwork, the thesis can get a deeper understanding of the case, while also understanding the context upon which it is built. Consequentially, the research questions can be analysed confidently, and the recommendations can be made more relevant than if a case study approach was not applied (Yin, 2014).

4.3. Data collected

As mentioned above, the study used several methods to gain data. This resulted in 24 instances of data collection through interviews or focus groups at different times in Myanmar, with an additional interview in Singapore. Further, as has been argued above, the data is also under interpretation of the researcher, meaning that the relationship and interaction between informants and researcher is also an important part of the data. The researchers positionality to the participants is then relevant to the fieldwork, and thus the researcher themselves become a tool in the data gathering process (Thagaard, 2013).

There was a total of 20 interviews throughout the data gathering process, and 4 focus groups (see table 3). The sampling process was based upon the personal network of the translator and LAMTIB Myanmar country manager, Ms Soe Thet San, her family, their employees, family friends, and local education centres. Ms Soe Thet San thus functioned as the researcher's gatekeeper, ensuring that enough information could be gathered. The relationship between Ms Soe Thet San and the informants gave some ethical concerns (discussed in section 4.7), however as the researchers were foreign to the region and language, and the fact that there is a general distrust towards outsiders, it was the only solution (S. Thet San 2017, personal communication, 2-17 October).

Table 3: Fieldwork key (Lie, 2017).

Source	Position	Date	Region
Soe Thet San	LAMTIB Myanmar country manager, translator.	02/10/2017-	Yangon/Meiktila/Dawei/Myeik
Daw Kyu Kyu Thinn	General manager, UPT Electric & Electronic Cooperative Company Ltd.	03/10/2017	Yangon
Kyi Lwin Oo	Save The Children Education Consortium.	03/10/2017	Yangon
Malar San	UNICEF Education Officer.	03/10/2017	Yangon
Dr Kyaw Moe Tun	Executive Director, Parami Institute.	04/10/2017	Yangon
Khaing Zin Win	Parami Institute Student.	04/10/2017	Yangon
Myo Swe	Manager, Meiktila Christian Orphanage.	07/10/2017	Meitkila
Helping Hand	Local Education for the poor donation organisation.	07/10/2017	Meiktila
Monestary Representative	Meiktila Buddhist Nun Monastery Education Centre.	07/10/2017	Meiktila
U Zaw Myint	Headworker for Thet San family oil business.	07/10/2017	Meiktila
Long Distance University Student A	Anonymised student of English.	08/10/2017	Meiktila
Long Distance University Student B	Anonymous student of Geography	08/10/2017 09/10/2017	Meiktila
Village focus group	Wun Dwin Township, Ohm ma dwae Village.	08/10/2017	Meiktila
Ko Tun Zaw Moe	Mr Linn Café manager and owner.	09/10/2017	Meiktila
Myo Thawta Win	Private School, Principal/Academic Affairs	10/10/2017	Meiktila
U Nandar Cariya	Sett Oo Monastic Education, Middle School.	10/10/2017	Meiktila
University Professor	Anonymous Source	11/10/2017	Meiktila
Teacher Source	Anonymous Source	11/10/2017	Dawei
University Student Focus Group (USFGa)	Student representatives from universities in Dawei. Long Distance and day students.	13/10/2017	Dawei
Education Manager Source	Anonymous Source.	14/10/2017	Dawei
University Students Focus Group (USFGb)	Student representatives from universities in Myeik, Long Distance and day students.	14/10/2017	Myeik
Dr. Mar Too Nyi Bu	Executive Academic Advisor, Hospitality and Catering Training Academy, Daw Khin Khin Kyi Foundation.	16/10/2017	Yangon
Munk Representative	Myin Thar Myo Oo Child Development & Monastic Education School.	17/10/2017	Yangon
Alan Lee	LAMTIB aquaculture biologist.	18/11/2017	Singapore LAMTIB office

Notable observations were also made at several of these data gathering exercises. During the interview with Daw Kyu Kyu Thinn, the researcher was given access to the UPT Electric & Electric Cooperative Company Ltd. manufacturing site. At this time the researcher was able to see on-the-job TVET and working conditions. Parami Institute showed the researcher how they implemented 'western' education methodology into their studies, as opposed to the 'rote'[5] learning widely used in the country. Additionally, outside interview situations some notable

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[5] 'Rote' learning or 'parrot' learning is simply put a learning methodology where students repeat back what the teacher said, in order to promote memorisation (Mackenzie, 2013).

observations were made regarding child labour and why young adults would rather work than attain secondary or higher education, and further how they are trained in tea houses and nail salons at young ages as an alternative to education.

4.4. Methods

A variety of methods were used to incur data. These include document analysis, fieldwork, interviews, focus groups, and finally observations. Following Thagaard (2013), these methods were chosen with intent and by reflecting on how the research questions could be best answered. The following subchapters will discuss how these methods were used in the thesis.

4.4.1. Document Analysis

The research design and theoretical framework presented above made the method of document analysis imperative to the thesis. Only through understanding past literature on the subject, could the current phenomena as understood by the informants be properly represented. While it is not unusual to use documents from organisations and businesses to supplement primary data like interviews, the thesis will use it not only for supplementary purposes, but also as part of the analysis itself (Thagaard, 2013). By analysing past documents on the issue, contextual precedent can be found.

Document analysis is also essential as the first stage of the decision-making process, as described by Davis (1996, p. 133). It is here argued that document analysis can be seen as '*exploratory research*', to understand '*the nature of the problem'* (Davis, 1996, p. 133). Thus, to implement decision-making as a theoretical framework, the first analysis chapter is dedicated to gaining a macro overview of the issues, in an exploratory manner.

The thesis used the strategy presented in Ringdal (2013) for its literary search, where one begins as if on the top of a pyramid, to gain a general overview. From this overview one recognises essential key words used in previous research, which one then can use to establish a search profile, which can be used to search for more specialised literature in established and recognised databases, such as Oria (the university library), BIBSYS, JStore, WebofScience, and Taylor and Francis (Ringdal, 2013). Google Scholar, as it is not under quality control measures, was avoided. By finding relevant results, one can then use these sources' references to find more literature specific to the issue (Thagaard, 2013).

From these results, one can find the central themes to the phenomenon, by separating periphery works from the relevant. This becomes the foundation upon which the study can build on.

However, these secondary resources have been handled critically, as White (2012, p. 62) notes, these resources were researched for a different purpose, and written for someone else.

Keywords used in literature search in this thesis are predominantly: "Myanmar Education", "Myanmar TVET", "Myanmar Education Reform", "Myanmar Education Development". These keywords gave considerable results for academic texts, if one searches for "Myanmar Education" in JStore, one gets over 2300 results. The first resource listed was extremely helpful in understanding the context of the case; Han Tin (2008) *Dictatorship, Disorder and Decline in Myanmar*.

To find more recent statistics and data, it was necessary to search on webpages such as britishcouncil.org, unicef.org, ILO.org, and worldbank.org. From this search, some particularly helpful reports were found by the British Council; "*Report: Policy insights for HE - recommendations for Myanmar*", "*Report: Empowering higher education in Myanmar universities*", and finally "*Report: Turning policy into action - UK-Myanmar partnership*". These should be considered the main literature for the thesis, although many reports and texts have been used, these are the closest to the issues the study investigates. There are few recent reports or literature, which means that most literature is in the early 2010's, after the implementation of the new constitution, but before the implementation of the new education reform (2017-18 schoolyear). The thesis is this a valuable addition to this discourse.

4.4.2. Fieldwork

The fieldwork was conducted by the researcher, Lise Hagen Lie, in cooperation with intern colleague Vilde Berg, and assisted by Ms Soe Thet San as translator, gatekeeper, and guide. The areas chosen for fieldwork were made based upon LAMTIB needs, where the Initiative were considering launching in the future. Data sampling was thus done by convenience, the informants were available because of known contacts, their network, and organisations internationally known (Thagaard, 2013).

A weakness of this approach is that the researcher might have missed useful viewpoints by not knowing actors outside the network of LAMTIB management (Thagaard, 2013). However, by interviewing a considerable number of informants to triangulate the information, and thus reaching theoretical saturation, this concern for error is made less likely.

4.4.3. Interviews

The interviews were done upon completion of an interview guide (appendix A), a participant request form (appendix B), and approval of the project by the Norwegian Centre for Research

Data. For more information about the interview sources see appendix C. The interviews were unstructured foremost, but because of language barriers there were times the questions felt more as open-ended surveys. Regardless, the interviews always followed the main themes given in the interview guide, and presented in the participant request form (Thagaard, 2013).

While the interview guide contained the main questions, themes and issues which the study initially wanted to explore, the interviews were also guided by the 'river with side streams-model'. This model is described by Thagaard (2013) as one where a theme is presented, but follow-up questions, or side streams, might lead away, but in the end converge, to create the main stream – understanding the theme. This model was appropriate because it allows for further more in-depth exploration of themes the researcher might not have been aware of before the interview (Thagaard, 2013).

The method was chosen for its ability to gain data on a person's experiences, and how one person might reflect on these (Thagaard, 2013). Further, having them be unstructured gained the additional favour of the interviewees feeling a measure of control in the setting. They would get the feeling of being able to lead the interview to where they thought the real issues lay. Thus, the responses of the participants are equally important and revealing as the questions of the researcher, meaning that the participants also guide the research process itself (Thagaard, 2013).

Ethical concerns were particularly important to the study, as there are multiple factors which could create sources of error to the data. Particularly, it was important to word the questions in such a way that the participants did not perceive a hidden agenda, or value, so that they would not simply answer what they thought the researcher might agree to (Thagaard, 2013). These issues are discussed more in section 4.6.

4.4.4. Focus Groups

A traditional focus group is described by Fangen & Sellerberg (2011) as a small sized group, which discuss a given theme with the researcher functioning as moderator. The moderator starts the discussion with a list of themes or questions, to which the discussion of them is unstructured or structured (Fangen & Sellerberg, 2011). This way, the researcher can gain an understanding of general opinions relating to the theme (Thagaard, 2013).

Further, the specific arguments the participants use can be analysed to understand the basis of those opinions. These arguments might also be used to understand how the informants understand and give meaning to the theme being discussed (Fangen & Sellerberg, 2011).

Fangen & Sellerberg (2011, p. 17) describes this as interactions on three levels, the interaction between the participants, the interaction of ideas and opinions which they hold, and interaction between sociocultural factors and communication styles. Consequentially, by using focus groups, we can create a broad opinion map of the theme (Fangen & Sellerberg, 2011).

The four focus groups used to gather data in this thesis, had varied characteristics. The first focus group was a meeting between the researchers and the Helping Hand donations organisations, which collects funds locally in Meiktila and gives it to educational programs in need. While the group mostly let the leader of the organisation answer questions, many of the local participants to the organisations were gathered as we met in a tea house. The group the research team met, was all male. The focus group was not particularly successful in data gathering but gave an interesting perspective into local initiatives in the education sector. They also functioned as gatekeepers to the Meiktila Buddhist Nun Monastery Education Centre.

The next focus group was during a visit to the Wun Dwin Township, Ohm ma dwae Village. The village was expecting us, and eager to answer questions. The participants and research team gathered in a local house, where we sat down, and discussion began. The village's predominant industry was rice production, which they sold to the highest bidder to be sent outside the village, often to Meiktila. The men of the village were unable to receive us, and so the gathering consisted of women of all ages, from village elders and grandmothers, to 18-year olds. The discussion was unstructured in nature, and most participants engaged in the discussion. In this discussion, education and TVET was discussed in relation to access for villagers, how education is viewed in terms of future work, and their livelihoods.

There were two University Student Focus Groups (USFG), USFGa which took place in Dawei, and USFGb, which took place in Myeik. USFGa consisted of six participants, who represented the Dawei University Student Union, and Dawei Computer University. They came from different departments within their university, Psychology, Chemistry, English, Geology, Technology, and Computer Technology. All but two came from the Student Union. This focus group was mostly structured, with the researcher giving the group questions which they were all invited to respond to. There were some concerns with sources of error in this interview, as the group had been in contact with the university. Regardless, the group gave answers relating to the Student Unions, and how these are considered in Myanmar, and further about their curriculum.

USFGb had both 'day' students, who study as their main occupation, and long-distance students, who have a different system where they take exams at the end of the school year, but do not partake in lectures. Three of them came from the History department, and three came from the Geography department, most were in their first year, but one history and one geography students were further along in their studies, in their 2nd and 4th year respectively. Because it at that time was exam season, there was a limited time available to hold the focus group, and so the group was split into day students and long-distance students. Both groups were done in a structured manner, as with USFGa, but gave answers on themes regarding life as a long-distance student versus that of a day student, and applicability of their studies to their future employment.

The selection for the focus groups were convenience sampling, however, the groups chosen were strategic in nature. As Student Unions are highly politicised in Myanmar, it would ensure comfort for the interviewees for the group to be homogenous in this nature. The same can also be argued for the villagers who had never before met a non-East Asian person (Turner, 2017). Further, the groups were homogenous enough to invite a sense of shared storytelling, so while the groups rarely had cases of disagreement, they gave expansive information (Fangen & Sellerberg, 2011). They all had a relationship to the education/TVET theme, and ensured that the data shows the phenomenon as a local one (Fangen & Sellerberg, 2011). For more information about the sources see appendix C.

4.4.5. Observation

Observation as used in this thesis, is based on purely gaining understanding of the phenomenon in question, through seeing it in the field. As mentioned in 4.3., some notable observations included seeing TVET in action, but observation also includes how people interact (Thagaard, 2013). This is particularly interesting in including a method which enables analysis of the three levels of interaction as described by Fangen & Sellerberg (2011).

Observation is often combined with interviews, as in this thesis, where the researcher and informant do an activity together, or meet either formally or informally. Understanding what the person is doing, as part of what they are saying, gives a better understanding of what the participant wishes to actually say. Further, establishing a relationship this way might enable access be given to the researcher, which was previously unavailable (Thagaard, 2013).

Such a relationship, and an expressed willingness to experience new situations, might also, according to Thagaard (2013), show the participants that the researcher has a sense of the

importance of the phenomenon. The sensitivity and closeness of the researcher becomes more apparent and might be enforced by the process. Thus, the participants might be more willing to open up (Thagaard, 2013).

4.5.   Analysis Methods

The method of analysis of interviews and focus group data in the thesis, is the categorisation system as described in Crang & Cook (2007) combined with document analysis to attain triangulation as described by Yin (2014). A cross-sectional design is used, where the information is based on smaller selections of interviews, which happen over a short period of time, and the interview which each informant is for the most part only done once (Ringdal, 2013). The system was chosen as it is recommended in qualitative literature (Aase & Fossåskaret, 2007; Album, Hansen, & Widerberg, 2010; Crang & Cook, 2007; Fossåskaret, Fuglestad, & Aase, 1997; Ringdal, 2013; Thagaard, 2013) for its ability to understand foreign cultures, include thick descriptions, and is ideal for interviews, focus groups and observations such as those used in this thesis.

The process of analysis begins with transcribing the interviews, focus group discussions, and observations. There transcriptions include, as described by Thagaard (2013), a 'thick' description of not only the information given by the informant, but also the phenomena being discussed, and further how the researcher might have influenced the data. By having this thick description, the research process and its circumstances becomes clearer, ensuring that these are clear in the case of replication of the study (Thagaard, 2013).

The process thus turns to coding the material, beginning with 'open coding', where meaning, intent and statements are used to further create a thick description of the data. Using these points of data, the researcher categorises the material, using themes the informants created through the interview process (Crang & Cook, 2007). The analysis thus creates a form of grounded theory; the theory, or results, of the study is built from the data (DeLyser et al., 2010). The results are grounded in the data, and so it prevents the study from simply being a descriptive replication of a groups' view of the phenomena. Consequentially, by also having a clear and systematic presentation of the sources of data, the study becomes replicable for further research (DeLyser et al., 2010).

This categorisation builds an explanation of the data, requiring the researcher to go through many steps of coding, categorising and collating it (DeLyser et al., 2010). Eventually, a concept map is created which can be presented and used in the thesis (see figure 7). A weakness of this

method, is that the entire method of analysis is inconvenient to show in a thesis, meaning that mostly the result will be available for evaluation. Never the less, it ensures that the thesis can analyse the lived experiences of its informants, as well as make meaningful contributions to the understanding of education and TVET in Myanmar.
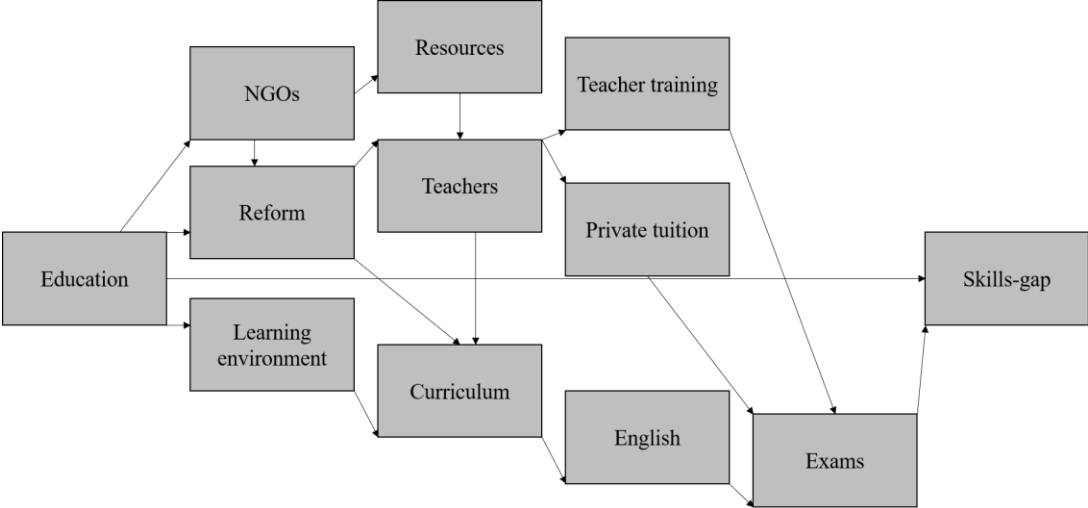
Figure 7: Categorization map of primary data

By using data from several informants and observation, which is thus analysed using a categorisation method, as well as document analysis, the thesis employs triangulation. Yin (2014) describes triangulation as a process where evidence from different, converging sources is utilized to show multiple perspectives of the phenomenon being researched. Put simply, using multiple sources, Yin argues, increases the likeliness of the study presenting the phenomena accurately (Yin, 2014).

4.6.   Ethics

Ethical concerns are particularly important to qualitative studies, because they tend to be highly complex (Hay, 2016). While few would argue against the fact that unethical research is wrong, produces bad results, and tend to give poor-quality data, it does not mean that ethical decisions in qualitative methodology are easy (Davis, 1996). In order to prevent an unethical approach to research, Hay thus argues that the researcher must be self-critical of ones conduct, have an awareness of one's identity, be theoretically informed of the phenomenon, and be able to resolve the ethical dilemmas as they occur (Hay, 2016).

Considering ethical dilemmas thus require the researcher to question the process of data gathering, the interpretation process, the presentation of material, and how the material will be

used upon submission (Thagaard, 2013). One should have a conscious decision behind each source, of not whether or not one *can* use something, but also whether or not they *should* (Thagaard, 2013). The decisions the researcher makes can have ramifications for the participants in the study, which further enforces the responsibilities of being a researcher, particularly one coming from a high-income country, coming to a lower-income one for research (Thagaard, 2013).

In the relationship between the researcher and other researchers, one must commit themselves to accurately and fairly present the research made by others, and the primary data found. Plagiarising others work is effectively stealing, and so one must be vigilant in referencing others work (Thagaard, 2013). This study uses the internationally recognised referencing standard, using the EndNote X8 software to ensure correct style. The international standard ensures that as precise information as possible is given about other researchers' work, this includes name, year of publishing, and page number, where specific points, quotes or definitions of terms are made in the thesis. If the point is made throughout another researchers text, and thus cannot be bound to a specific page, only author name and year is given (Thagaard, 2013).

Regarding the relationship between the researcher and the participants, there are a number of ethical concerns which must be addressed both before, during and after the research process. As Thagaard (2013) argues, the personal relationship between the researcher and participant makes the ethical responsibility even greater, then that of other methodologies. Additionally, she argues that the possible harms of a qualitative study might be difficult to prove or less direct, meaning that the researcher have an important personal responsibility, as well as an ethical one (Thagaard, 2013).

Thus, to address these responsibilities, three key components are essential before research can begin. These are informed consent from the participant, a conscious decision must be made regarding confidentiality, from both the researcher and the participant, and lastly the consequences of participation must be evaluated on both sides (Thagaard, 2013).

4.6.1. Informed and Free Consent

Legally, data gathering involving people can only be done after they have given informed and free consent to participate in the research. This consent can be retracted at any time, without the participant experiencing any negative consequences (Thagaard, 2013). A broad outline of the research, what it encompasses, and what is expected of the participants, should be given. This way, the individual is informed of the process, and can make a conscious decision on

whether or not they would like to participate (Hay, 2016). Informed consent is based on the principle that a person has a right to make decisions on how to live their lives, and what information about them is distributed, as well as the way in which this is done (Thagaard, 2013). Additionally, this consent should be given freely, without external pressures (Thagaard, 2013).

Informed consent can at times be challenging, particularly in qualitative research. This is because too much information might influence the participants behaviour (Thagaard, 2013). It is known in Myanmar that their education system is not on-par with the international standard, which again meant that the research team frequently encountered issues with acquiring data.

While it was made sure that the thesis would not be looking to discredit the education system in Myanmar, it was still apparent that informants avoided discussing negative or less than favourable issues with it (S. Thet San 2017, personal communication, 8th October). During one interview of a long-distance student of English (LD Student A, see table 3), while the student did not seem to mind answering our questions, the lodging's manager she rented from, and her teacher, stopped the interview. They told us that such highly educated women should know better than to ask questions in such an underhanded way. Our interpreter explained that they did not wish for LD student A's answers to reflect negatively on them as educators, or the system as it functions in Myanmar. On the other hand, when the researchers asked about their university to people outside an interview setting, where they did not know we were researchers (and thus are not included as data for the thesis), they had no issues in talking about negative aspects of the system.

Informed and free consent is thus an ethical dilemma, which must be approached as an ongoing process throughout the research process as well as when one submits their work (Thagaard, 2013). When the participants give their consent, they are not aware of how the results will be presented upon conclusion, meaning that they might take issue with the results. This is especially important if the environment the researcher gathered data from, is recognisable in the thesis (Thagaard, 2013).

Consent as a process is difficult by the nature of the study, as many of the participants are simply unreachable because of distance, and lack of access. Many participants did not wish to give their contact information, as they did not want to be able to be identified in any way. Thus, ensuring that the participants are reflected in the results must be done with extreme vigour through the analysis process.

4.6.2. Confidentiality

As a principle, confidentiality is an extension of the principle mentioned above, where a person has a right to decide what and how information about themselves are distributed. Participants have a right for their information to be treated with confidentiality, and to stay anonymous in the submitted study as well. This is also part of the responsibility of the researcher to ensure that the participants do not experience harm, from participating in the study (Thagaard, 2013).

Consequentially, a researcher might encounter a dilemma of whether one can promise anonymity, or ensure that the project can be replicated, and further be evaluated as reliable and valid. Thagaard (2013, p. 29) here suggests that the ethical concern of the informant, is more important than the replication aspect. Hay (2016, p. 32) further argues that to ensure this confidentiality, one can mask identifying characteristics, such as location, gender, or occupation, so that they would not be recognised by the reader.

In this thesis, the confidentiality has been incredibly important. As mentioned, education is a politicised aspect of Myanmar society, meaning that some participants saw it as possibly detrimental to their future work prospects, if they were identified as a participant in the study. Therefore, in the participant request form (appendix B), it was highlighted what kinds of information the participant did not want included in the thesis. Most in the Yangon area, or people in managerial or higher positions in society, did not have issue with their names being used, while students and educators found it impossible. Thus, the thesis has combined the two solutions of Thagaard (2013) and Hay (2016), by giving anonymised names such as LD student A, USFGa, and Education Manager Source (EMS).

4.6.3. Consequences of participation

As mentioned, the potential consequences of participation were a contentious issue throughout the research process. Special care was taken in the process of creating the participant request form (appendix B) and interview guide (appendix A). However, an issue which was encountered regarding the request form, was that it was simply too long, and that the English was incomprehensible to many participants. Thus, with every interview we took care to explain the form, which often took more than 10 minutes.

After, the researcher would ask explicitly whether the information was understood, and if there were any concerns which should be addressed. The option of anonymity was thus not difficult for the participants to ask for. The participants were thus making a conscious and informed

decision of participation, and potential issues relating to the consequences of their participation were discussed before the process began.

4.6.4. Power relations

While consent should be given freely, there is no shying away from the inherent power balances in a research process (Hay, 2016). In most cases, this imbalance gains the researcher. While participants might find the themes interesting to discuss, there could also be uncomfortable or problematic issues for them to reflect over (Thagaard, 2013). Hay (2016) argues that in a qualitative setting, these power relations usually present themselves as one of three types.

The first type is a reciprocal one, where the researcher and the participants mutually gain from the process and the results. Here the power relations are minimal, but present (Hay, 2016). The other two types are both asymmetrical relationships, where one gains more than the other. The second type is called 'studying up', where the researcher studies participants in managerial positions, or in the 'super-rich' category, which would not lose on participating because of their financial and social capital (Hay, 2016). The third, is defined as a relationship where the researcher holds a greater power than the participants, either through position or gain of the process (Hay, 2016).

One ethical concern in regards to power relations is the question of when a researcher is becoming a burden for their informants, versus whether one has gained enough data (Album et al., 2010). This dilemma is especially applicable to this study, as one of the main sources of information was the LAMTIB country manager, our gatekeeper, guide, and translator, Ms Thet San. Her being part of our research team meant that the consequent results had a greater pressure to be helpful to the LAMTIB Initiative, one can describe it as a trade-off between getting a general study of education and TVET in Myanmar, to a business research approach. This was, however, not detrimental to the study, as it was already the intention of it. On the other hand, Ms Soe Thet San took time out of a busy schedule launching the Initiative in Meiktila, to travel with us in our research. However, Ms Soe Thet San was able to acquire information about local initiatives, businesses and establish new relationships, helpful to launching the Initiative. The relationship between Ms Soe Thet San and the researchers can thus be categorised as a reciprocal one.

In another instance, we interviewed the headworker for Ms Thet San family business, U Zaw Myint. He voluntarily partook in an interview, but as he was asked by the daughter of his employer to partake, we had to take care with what questions to ask. While it was unlikely any

answers would get him in trouble with his employer, the researchers still had to be careful not to demand answers which could be detrimental to his future employment. This was thus an asymmetrical relationship, where the researchers had most to gain.

4.6.5. Reflexivity

In order to critically reflect on the issues we experienced in power relations, it was critical to employ a reflexive approach to the research process. By being aware of the power relations, and thus understanding them, the researchers were better able to respond to them. This way, Hay (2016, p. 37) argues that one can avoid taking advantage of those at a disadvantage in order to gain data. A reflexive approach means constantly evaluating the relations between the researcher and the informants (Hay, 2016).

This approach is also part of a post-positivist theoretical foundation, in that it rejects that information can be obtained objectively, and that the researcher themselves, and their position in reflection to the informant, shapes the data one is able to attain (Thagaard, 2013). It is thus important to be aware of ones identity in context with the research process, as ones' language, clothes, gender and age will influence how the participants respond (DeLyser et al., 2010).

Crang & Cook describes this as a recognition of, and accepting, ones' subjectivity, rather than reaching for an impossible objectivity. By doing this, a subjective point of view is '*less of a problem and much more a resource for deeper understanding*' (Crang & Cook, 2007, p. 13). DeLyser et al. (2010, p. 83) further engages with this discussion, in that a researcher should accept that an opinion or view does not come from 'nowhere'. By making ones positionality known to the reader, the researcher is able to reflect upon how their identity affect the phenomena they are researching, which again creates a deeper understanding of it (DeLyser et al., 2010).

The role of the researcher

As a relatively young, female, Caucasian, European, masters researcher in a previously long closed off country, who visited areas where some had previously never met anyone from this background before, it is easy to see the importance of the researcher's positionality. As was seen in the comments made from the teacher and manager in section 4.6.1., these characteristics were indeed a consideration for those concerned with the research. In order to not give an air of superiority, the researcher would refer to the Myanmar translator, Ms Thet San, as the manager of the company under which the researcher worked. As a female, there were no clear

encounters of sexism, and most participants were female themselves. Regardless, these positional characteristics were considered during the research process.

Being reflexive in the research process, also means being aware of the role one plays in the mind of the participants. Aase & Fossåskaret (2007) describes four methodological aspects of observation one can use to ones' advantage to do this. Firstly, one must identify the status the participant place you in, as in the interview with U Zaw Myint, the researchers had the status of friends of his employer. Secondly, one should identify what expectations come with the status given to the researcher. Thirdly, reflect on whether these expectations enable the researcher to access the data needed. If these expectations are acceptable, one should fulfil them, if they do not, one should move to step four where one breaks the role expectations given, and thus gain a new status (Aase & Fossåskaret, 2007).

Different roles were employed during the data gathering process, depending on the setting. While to Ms Soe Thet San and her family, the researchers' role was intern of the sister company in Singapore, it was not an ideal role to attain information from other participants in Myanmar. In the interview in Dawei with the EMS, the researcher was presented as an official representative of the company, and in the USFG groups, the researcher was presented as a student researcher. What roles were most applicable were presented and guided by Ms Soe Thet San, according to the position of the participant. Thus, the researcher used their positionality as a way to gain access to information.

4.7. Limitations of the study

The main difficulty with data collection was the limited time available to do fieldwork. Thus, the team had to gain as much data as possible over little time and made building trust bonds with the participants difficult. Secondly, while Myanmar has certainly become more open, education is still a tenuous subject. While Myanmar once had one of the best education systems in South East Asia, this changed under the military junta, meaning that questions regarding it can be seen as a loss of face.

For example, hardly any teachers were willing to speak with the research team. We were given a few reasons for this, including that previously the military would simply remove people who might speak ill of the education system, or the fact that they might be embarrassed being questioned by a young foreign university student on their curriculum and teaching styles. Thus, the researchers' positionality made access to professors and teaching staff difficult, unless these already held a western-friendly or a fearless critical view of the system.

On a more general note, while the title of the study gives the assumption that the findings can be generalised to suit the local level in Myanmar, the data gathering happened only in safe regions which cannot be generalised to also encompass the ethnic minority states. Additionally, one can argue that it is detrimental to the thesis that the influence of conflict in the country is not included in the discussion, and thus one loses a central theme. However, this would in fact be an entire thesis, and to avoid superficiality, it is not included.

Another caveat to the study, is the use of an interpreter. While it was essential as many important participants were not able to communicate with the researcher in English, it could have influenced the data. There were no reasons to believe that the interpreter changed the questions or answers in any considerable fashion, or that the information was not relayed honourably. However, Ms Soe Thet San, as the daughter of a known business man in Meiktila, became a factor in regard to her own positionality to the participants. In order to circumvent this, the research team attempted to find participants with little or no connection to the family or business. However, one cannot be certain her status in the local community did not influence the data.

In terms of resources, the study was generously 50% funded by Precco, the LAMTIB Initiatives financial donor, until it itself becomes profitable. This enabled us to do the fieldwork and get the necessary resources to complete it. Without this funding, it is highly unlikely an as in-depth study could have been possible. However, it also means that the study was financed to bring results which would contribute to LAMTIB. As mentioned above, this was regardless not detrimental to the thesis, as this was already the intention of the study.

'The statement that "Myanmar is unlike other countries in many ways" […] is largely valid and has implications both for the implementation of projects in Myanmar and for a possible application of the Myanmar experiences to other countries' (Middelborg, 2002, p. 1).

5. Problem Recognition: Education and TVET in Myanmar

To find contextual and cultural precedent, the problem recognition is dedicated to find the macro structures in place which enforce the issue the Initiative wishes to alleviate. This way, one can better understand how issues on the local level are part of a broader system, and how this pertains to globalisation, the cycle of poverty, as well as what kinds of precedent exists in society which the Initiative can make use of.

The first section of the chapter concerns itself with economic structures. While at first glance this might seem as a broader contextual issue, it is essential to understand the economic aspects of society, as well as employment numbers and funding of education. By understanding these aspects, we can see the current state of the cycle of poverty in Myanmar, how many might be 'trapped', and what is being done.

The second section of the thesis gets to the core of the study and looks at the macro level situation of education and TVET in Myanmar. This section will look at historical factors leading up to its current state, and then analyse the operational aspects, present some of the different types of education and TVET in Myanmar, as well as the newly implemented education reform.

This chapter will then have created the broader context on which the primary sources information of the local level, can be used more effectively. We can then use this information to see what aspects are systematic issues, and which might be specific to the local level in Meiktila and the other potential launch sites.

5.1.   Economics in Myanmar

As mentioned in section 2.2., Myanmar has many qualities which should afford it a high economic output. Yet, GDP Per Capita is at US $5,800, reflecting the country previously being closed off to the global market (Johnston, 2018). About one third of households in Myanmar are considered to be in poverty (The Businesses of a Better World, 2016). Having become more opened to international trade in recent years has ensured some economic growth, but as the World Bank (2017) found, domestic challenges have been problematic for growth; while in 2011 to 2015 the average growth rate was 7.8%, it was estimated at 6.7% in 2016 to 2017. Inflation is also rampant, with its peak at 14% in October 2015. Consequentially, the Kyat deprecated by concerningly 30% between 2015 and 2017, showing a continuing decline in

economic control (World Bank Group, 2017). These domestic issues are designated to Myanmar's dependency on commodity receipts, its production base being highly limited, and it being natural disasters prone (World Bank Group, 2017).

The Asian Development Bank's Technical Assistance Consultant's Report on the situation in Myanmar is hopeful for growth in strategic sectors (2013). In 2013 three sectors were found to pertain to the highest percentages of GDP. The services sector accounted for the highest share, at 38%, followed by the agricultural sector at 36%, and finally industry at 26%. While agriculture is declining, reflecting Myanmar's urbanisation, the services and industry sector show signs of growth. In industry the growth comes from exports of the petroleum gas, legumes, textiles and garments, and logging. This is further reflected in FDI in the industry sector, which is mostly found in oil, power, and gas (Technical Assistance Consultant's Report, 2013).

Services, particularly hospitality and tourism, is claimed by the report to be '*fundamental for future economic growth*' (Technical Assistance Consultant's Report, 2013, p. vi). With the country opening for foreigners only relatively recently, it is not surprising that demand for services in the industry is rising. In 2012 15% more tourists came to Myanmar than the year before. However, as the report argues, the industry is dependent on better infrastructure in every sector, from roads, hotel accommodation, access, and skills training for tour guides (Technical Assistance Consultant's Report, 2013).

We see that most observers are hopeful for the economic future of Myanmar (Noakes, Rogers, Sardaña, Huang, & Win, 2017; UNESCO, 2013b). While inflation is maintaining a high percentage, estimated at 8.5% in 2017, the Kyat has become more attractive as a market currency, for those currencies which has performed better than it against US$ (Noakes et al., 2017). There is also optimism for broader economic and social change, pertaining to the installation of the NLD in government, the removal of most economic sanctions against it and subsequent liberalisation of the country. This makes Myanmar more attractive to FDI and better access to international value chains (UNESCO, 2013b).

Even still, there are significant challenges as the human capital of Myanmar is largely unskilled, which stunts the populations ability to participate in the growth. There is a need for better education and TVET in order to prepare for the market needs of the soon-to-be future (UNESCO, 2013b). Consequentially, the population depends on the bountiful natural resources of the country to sustain themselves. Unfortunately, these same natural resources are also in immediate need of attention in order to ensure ecological sustainability and prevent over-

extraction. Deforestation is prevalent, and Myanmar had the highest recording rate of it in Southeast Asia in 2014 (Asian Development Bank, 2014).

5.1.1. The NLD Budget

The NLD had a rough start in terms of economic power of the country. As government change came closer, a budget plan for 2016-17 was sped through to implementation by the military backed oppositional party. The budget increased spending by 15% compared to that of 2015-16 (Economist, 2016b). Consequentially, the NLD which had ran on political reform had to first address the considerable economic deficit, estimated at 4.3% in 2016-17 (Economist, 2016b).

Upon attaining the government position, the NLD has unfortunately not lived up to international hopes. A 12-point plan was presented in July 2016, where the economic priorities of the party were laid out. However, while rising expectations for international observers, it was seen as a disappointment, with the Economist (2016e) calling it '*merely a series of aspirational bullet points*'. Even still, investment reform was enacted, enabling FDI (Economist, 2016e).

Additionally, it showed that peace, reconciliation, infrastructure support to the agricultural sector, and skills building were key priorities to the NLD (Economist, 2016a). They did not modify the 2016-17 budget in any considerable way. Thus allowing 12% of the total budget to be spent on defence, and by the half the fiscal year was over, some ministries had used their total budget for the year (Economist, 2016a).

The party was given more freedom in formulating their 2017-18 budget. As the first budget under their control, it was seen as an indication of not just future economic policy, but also a reflection of government power in regards to the military junta (Economist, 2016a). March 17th the budget for fiscal year 2017-18 was passed at US$15.5 billion, further broadening the deficit to 4.52% of GDP (Economist, 2016a; Lynn, 2017).

The budget was marked by the continuing unprofitability of several state-owned enterprises, and the global oil price crisis (Lynn, 2017).The highest receiver of funds was the Ministry of Planning and Finance with 22%, the second highest was the Ministry of Electricity and Energy at 20%, and finally the Ministry of Defence with 13% - 1% higher than the previous budget. The crucial ministries which are responsible for health and education were given only 13% of the total budget combined (Economist, 2016a).

The recommended amount to be spent on education alone by UNESCO is 20%, leaving a large deficit in education spending in order to implement reforms which the NLD have had a key aspect of their manifestoes (Economist, 2016a). Generally, international observers seem exasperated by the fact that further spending in social and public services, as well as infrastructure, is needed to improve development and sustain economic growth (World Bank Group, 2017).

5.1.2. FDI in Myanmar

FDI was significant when Myanmar began allowances for it, in 2015-16 a total of US$9.5 billion was approved by DICA. However, it has been decreasing, in 2016-17 the Directorate reported that they would 'exceed' the US$6 billion target. This showed to international observers that there has been a significant decline, as their target is over US$3 billion lower than the previous years approved FDI. Much of this comes from uncertainty, The Economist (2016a) argues, as the NLD has yet to show investors a stable and predictable economic environment (Economist, 2016a). The largest FDI investors in Myanmar are the People's Republic of China, Hong Kong and Thailand, which make up three quarters of total FDI in the country. Statistically there are measures of FDI in all sectors, although these amounts are small compared to energy investments such as oil and gas (Technical Assistance Consultant's Report, 2013).

It is a complex and difficult process to obtain permission to invest in Myanmar. In the current Ministry system, there are overlapping responsibilities, meaning that all departments which might be relevant must be approached. The approval is also at the discretion of the Myanmar Investment Commission. Additionally, there is a diffuse judiciary system, with at times overlapping taxation between departments. One can thus expect considerable losses to taxation, which only pertain to foreign enterprises (OECD, 2014).

There are also concerns regarding the speed, quality and labour practices of industry in the country, and how these might reflect on the products sold as exports internationally, should a foreign business produce there (The Businesses of a Better World, 2016). The new investment law mentioned above made no note of social responsibilities of the enterprises (Amnesty, 2017).

Consequentially, we find that people are evicted from their homes, and that businesses make little effort to avoid pollution. Amnesty (2017) makes note of an incident at Lerpadaung mine, where they had begun mining and producing copper. Two protest leaders were criminally charged and faced four years in prison for protesting the Lerpadaung projects long record of

eviction, and reports suggesting the development of the copper is detrimental to the health of nearby villagers (Amnesty, 2017).

5.1.3. Employment

While few in Myanmar can be defined as inactive, there is rising concern of unemployment, especially among youth (OECD, 2014). Participation in the labour force, particularly among female labourers is the highest in the region. Regardless, one can find the issue outside official statistics as argued by the OECD in 2014. The World Bank cites that only 4% are unemployed, and regarding youth unemployment, its only 11.5%. The official numbers from the Myanmar Department of Labour however, contends that total unemployment is at 5.4% (OECD, 2014).

When surveying internally the Myanmar's Parliamentary Planning and Finance Development Committee, however, one finds that in January 2013 unemployment could have been at 37% (OECD, 2014). There is thus a mismatch between official numbers and reality. Among youth, one can find frequent anecdotal evidence of graduates being unable to find work. What is available does not fit with their expectations of post-graduation careers, or they are unwilling *'to do "unprofessional" jobs'* (OECD, 2014, p. 33).

Noakes et al. (2017) discussed the results of the 2015 *Myanmar Labour Force, Child Labour and School to Work Transition Survey*, in their work. Here, unemployment was argued to be as low as 0.8% (see table 4). However, labour underutilization is prevalent, as shown in its aggregated form comprised of unemployment, underemployment and potential of the labour force, in table 4. This data shows that labour underutilization is 6.9% higher among female than male labourers. There are also concerns that the unemployment figures are under recorded, as there are no unemployment benefits in Myanmar, meaning that one has to work in order to simply survive (Noakes et al., 2017).

Table 4: Summary of the 2015 Labour Force Statistics (Noakes et al., 2017)

	Total	Male	Female
Working age population (15 years and above)	33 934 662	15 553 856	18 380 805
Labour force	21 959 797	12 474 495	9 485 302
Employment	21 791 335	12 391 395	9 399 940
Unemployment	168 462	83 100	85 362
Labour force participation rate (%)	64.7	80.2	51.6
Unemployment rate (%)	0.8	0.7	0.9
Aggregate measure of labour underutilization (%)	6.9	6	8.1
Average weekly working hours	51.55	52.74	49.97
Average monthly wage (in ,000 Kyats)	134.49	147.2	119.04

Thus, manner of employment does not reflect the real skills of the labour force, leaving a large gap for potential utilization (Noakes et al., 2017). Table 5 shows that most employed people were employed in the agricultural sector, followed by retail and manufacturing. Accommodation and food service activities, such as tourism, the area identified by the Technical Assistance Consultant's Report (2013) to be fundamental for further growth, only constitutes 1.3% of employment.

Table 5: % of employed persons by industry (Noakes et al., 2017)

Industry Group	% to Total Employed
Agriculture, forestry and fishing	51.7
Wholesale and retail trade; repair of motor vehicles and motorcycles	14.3
Manufacturing	10.9
Others	9.1
Construction	4.7
Transportation and storage	4.4
Administrative and support service activities	2.3
Accommodation and food service activities	1.3
Mining and quarrying	0.9
Domestic	0.3
Electricity, gas, steam and air conditioning supply	0.1

5.1.4. Skills Mismatch

The discussion above shows that there is a trend of skills mismatch between the labour force, and the employment market. Even when people are employed, it is common for employees to be both over- and underqualified, and that their skills are not used effectively. Thus there is a trend of unproductivity where workers simply are not matched well to the work they do (OECD, 2014). To continue the countries' development momentum gained from NLD liberalisation, it is vital to develop their human capital.

Already we find that enterprises in Myanmar are reporting a shortage of skilled workers, and find it to be a '*serious or very serious obstacle to their operations*', upending all other obstacles (OECD, 2014, p. 31). A survey of businesses in Myanmar in 2014 found that 57% experienced a shortage of workers skilled for their work, a factor which is particularly pressing in the tourism industry where 61% reported the same. In order to address this, there needs to be an acute strengthening of the TVET sector (OECD, 2014).

The fact that graduates are not 'work ready', is a major factor accumulating the problem (Technical Assistance Consultant's Report, 2013). It is argued that students are not able to apply the knowledge attained through their degree, because the learning process is based on rote learning. It is further amplified by the fact that teachers have little experience in work outside teaching, and thus are not able to apply knowledge or perform the skills needed in the workplace. There are also very rarely internship programs so that the students gain real hands-on experience. Generally, industry have very little say in the programs given to students, meaning that the universities get no input on how to improve curriculum to the job market (Technical Assistance Consultant's Report, 2013). Additionally, students do not have many career services available, so that they can get a better understanding of the industry they are joining (OECD, 2014).

Consequentially, while we should see an excess of skilled workers, according to the number of college graduates every year outperforming industry growth, we see that the quality of said degrees are subversive to the statistics (Japan International Cooperation Agency, 2013). We thus find that there is an insufficient supply to meet the demands of the market (OECD, 2014).

The problem is further amplified by the fact that there is little oversight of what skills will be in demand, or indeed is in demand currently (OECD, 2014). A law passed in 2013 would oblige employers to give notice to the Labour Exchange Offices, where they to have a vacancy. However, it is yet to come to fruition (OECD, 2014). Systems to analyse the job market, and

thus guide educators on what industries will be in most need, are currently being developed (Technical Assistance Consultant's Report, 2013).

For an employer, the situation leaves no choice but to train ones' employees themselves, even if they are university graduates (OECD, 2014). However, as incentives for doing this training is quite low, the employers invest only the minimum amount for the employee to perform their work. The OECD (2014) found that over half of firms in Myanmar, never spend anything on training their employees. Thus perpetuating underutilization of its human capital (OECD, 2014).

A cost benefit evaluation is therefore made with each hire, as one must not only build proficiency, but also basic skills for the job. The Technical Assistance Consultant's Report showed that in the computer sector, it would take six months from a graduate is hired to become 'useful', and an entirety of two years before they could be described as on a professional level (Technical Assistance Consultant's Report, 2013).

5.1.5. Brain-drain

Another issue which perpetuates this lack of utilization, is the fact that employees leave their employment frequently (Technical Assistance Consultant's Report, 2013). As the employee has yet to reach a professional level, their pay is also reduced to make up for the need to train them. Dissatisfaction with the wages and level of work thus makes employees seek alternatives to their current employment – using their gained training to gain a better position (Technical Assistance Consultant's Report, 2013).

Consequentially, we see that many skilled workers in Myanmar turn to opportunities abroad in order to make up for the low wages in their own country (Technical Assistance Consultant's Report, 2013). This happens in near all sectors, even such as in the car repair industry, which is experiencing shortages of qualified employees (Japan International Cooperation Agency, 2013). Reports from foreign companies, such as the Development Public Company Ltd., an Italian-Thai company, found it difficult to find qualified nurses, lawyers and agriculturalists in Dawei (Technical Assistance Consultant's Report, 2013).

Once an employee has gained the appropriate knowledge and experience, it is hard for businesses to retain them. In the Information and Technology sector one finds a particularly high turnover, with an attrition rate of 90% (Technical Assistance Consultant's Report, 2013). In hospitality and tourism, there have been concerning reports like a restaurant where 90% of the staff was lost over 12 months. The solution for many is then to turn to foreign expertise. In

the garment sector, it is common to hire Korean and Japanese production technicians (Technical Assistance Consultant's Report, 2013).

Myanmar can thus be argued to be a classic example of brain-drain. The brain-drain theory is described as the process of tertiary educated graduates, moving abroad in mass to work (Séguin, State, & Daar, 2006). This results in a country not being able to profit from the education of their skilled workforce. While the numbers of immigrants leaving Myanmar to work are contested, there are estimates like the one the Asian Development Banks cites at 10% of the population working abroad (Technical Assistance Consultant's Report, 2013). However, other resources show that in Asian countries alone, such as Thailand, Singapore, Japan, and Malaysia, there should be somewhere between 2.2 and 4.8 million Myanmar citizens, working (OECD, 2014). This is high, even compared to other developing nations with high emigration rates like the Philippines (OECD, 2014).

The Myanmar diaspora hold great potential for a wave of skilled workers to return, which the government has understood and are working on initiatives to instigate. The OECD (2014) argue that their efforts in this sector suggest that they are more concerned with returning this trained diaspora home, than ensuring that those who have yet to leave, stays. The diaspora is made up mostly of workers which attained primary education, and left for vocational work abroad in hospitality and services (OECD, 2014). These very same vocational services are identified above to be the essential for growth.

However, surveys suggest that there is a divergence between what the diaspora would like to do upon return, and the needs of the market. While 3% said they would like to return to one of the major cities, 78% said they would rather go back to their villages or hometowns and become farmers. Reality in the job market suggests that this will not be possible for most, meaning they must move to the larger cities. The wishes of the diaspora and reality in Myanmar thus deters their return, which could be solved by creating better linkages between the rural agricultural sector and the urban cities. Thus, one can ensure value chains linking the rural and urban in such a way that the vocational skills the diaspora has attained are not lost (OECD, 2014).

5.2.   Globalisation, Technology and Social Media in Myanmar

As argued above, it was the liberalisation and opening access to foreigners which ensured rapid development and economic growth in Myanmar. At this stage, globalisation has become integral to the country's future, and has affected the lives of people in Myanmar considerably. Having been closed off to foreign influence for so long, under socialist military rule, this is

hardly surprising (Swe, 2015). What has been surprising, is how globalisation and more directly the influence of communication devices such as cell phones, have influenced life in the country.

Myanmar, as shown, have a high concentration of low-income and low-skilled people. Zelezny-Green et al. describes in their report on digital inclusion low-skilled and low-literate people in general, that technological devices can substantially help their quality of life. These devices need to be made intuitive and to the needs of the user. This way, one can integrate technology in most parts of life, that being agriculture, government or health practice. By doing this, the users are able to function better independently, and technology contribute to the users' life in a positive way, which was impossible without it (Zelezny-Green, Vosloo, & Conole, 2018).

In terms of Myanmar, despite having the characteristics of a society where Zelezny-Green et al.'s recommendations would be applicable to include the low-skilled and low-literate, one sees that digital inclusion is amazingly high. In 2013, only 7% of Myanmar's population reportedly had mobile phones, while in 2016 this had jumped to 90% (B. A. Moe, 2017). This rapid development in the sector was a consequence of foreign investment in the telecommunications network, by companies like Telenor and Ooredoo (B. A. Moe, 2017). A combination of liberalisation of trade regulations, a skyrocketing demand, and rising imports of technology, cumulated into 80% of the phones in use in Myanmar being smart-phones. This is significantly higher than other countries in its region (Pande & Jasuja, 2017).

In comparison, the digital financial sector has not seen such a mass renaissance. Not even a quarter of Myanmar citizens have a bank account, and per 100 000 adults there are only two ATMs. Consequentially, one has to go to larger urban towns or cities to get cash, a necessity for life as only 2% of monetary transactions are done digitally (Pande & Jasuja, 2017).

Perhaps because of this, is the country's devotion of social media. As the extensive telecommunications network enable providers to give cheap bundles of data, one's social media profile has become part of one's identity (Pande & Jasuja, 2017). The two main social media providers, Facebook and Viber, a communications app, have 14 million and 25 million active users in Myanmar respectively (Pande & Jasuja, 2017). In fact, Facebook is so prevalent it '*is the internet itself*' (Specia & Mozur, 2017) To many Myanmar mobile phone users, there is a limited understanding of how the internet pertains to them, or indeed what it is (Sibthorpe et al., 2015).

The presence of social media has filled a void left by the restrictions of free press, meaning that for most people in Myanmar, Facebook is their main source of news (Amnesty, 2017; Kinseth,

2018). As Kinseth (2018) writes, many users of Facebook think of it as '*the only entry point for information*', and the posts made are considered '*actual "news"*'. In the rural areas outside of Yangon are more likely to hold this perspective, not seemingly understanding that posts can be used for different purposes than actual news.

Another issue accumulating from this prevalence of social media, is its ability to spread information which might be untrue – fake news. Kinseth (2018) was a conflict specialist working in Myanmar and describes in detail how social media in Myanmar affected her work. Working for a foreign organisation, she was aware that they operated '*at the governments pleasure – or, with the slightest misstep, not at all*'. Before the Rohingya crisis came to a head in August/September 2017, suspicions of foreign NGOs worsened, under the suspicion that they worked on either side in the conflict. News spread that an organisation gave more to one side rather than the other, taking a political stance on the crisis (Kinseth, 2018).

Out of fear of repercussions, the NGOs decided to no longer give out branded materials, like t-shirts, pens and notebooks with their logo. If an image of their logo was spread in the wrong context, through the wrong political group, it could not only misrepresent the organisation and prevent them from working in Myanmar, but also break a fragile peace between several ethnic groups. She writes that '*any misstep or slip of the tongue could prove to be the match to spark a great fire*' (Kinseth, 2018). Local employees where thus used to scan for local perceptions of their organisations, as well as how the international community in general was viewed from social media.

After the August/September crisis, hate speech and fake news were spread quickly and indiscriminately on social media (Kinseth, 2018). News of Rohingya affiliation with the jihadists movement was shared as truth. Ballooned guesstimates on the number of human losses both among security personnel and Rakhine people were sent all over the country, and internationally. Consequentially, many in the Rakhine region came into a '*"kill or be killed" mentality*', and news confirming plans of even more violence were spread through social media (see figure 8) (Kinseth, 2018). These messages were not just widespread in the Rakhine region, but also all over Myanmar. A teacher in Mandalay, U Tin Win, is quoted saying that he demanded his family stay indoors the next day after receiving the messages like the ones in figure 8 (Specia & Mozur, 2017).
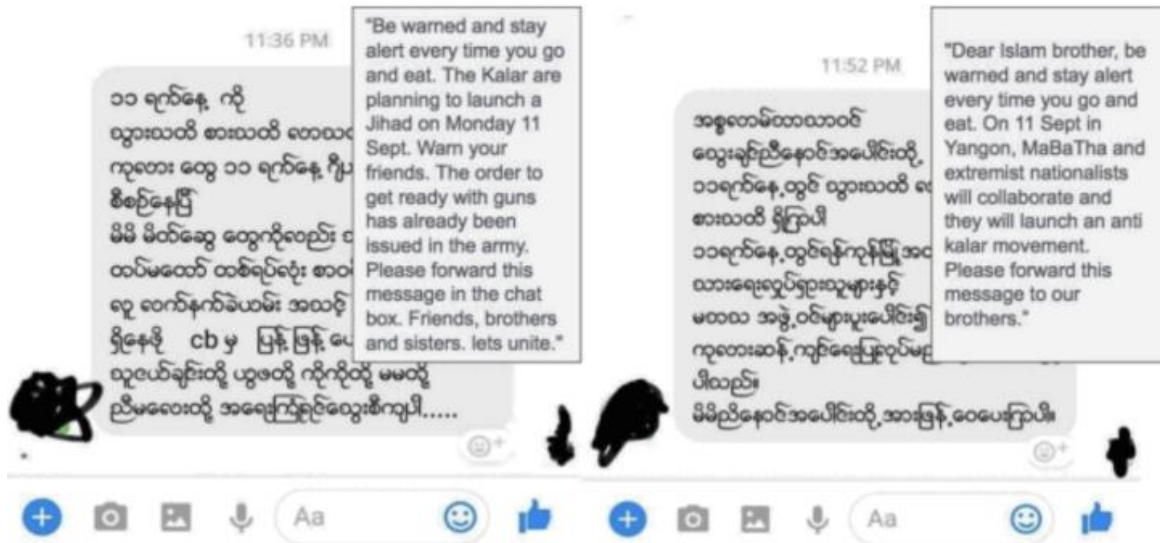
Figure 8: Texts of inflaming nature sent post-August/September crisis (Kinseth, 2018).

So, while technology has integrated itself into Myanmar society astonishingly quickly, we see that there is a lack of training and education in critical thinking skills. While large markets like Europe and USA get much attention from Facebook in regards to hate speech and thus are quickly able to ban content in breach of community guidelines, this is not so in Myanmar (Dellinger, 2018). Despite its huge market size, it is still disconnected enough from the rest of the world that it went under the radar until NGOs pointed out the messages in figure 8 to Facebook (Kirby, 2018). While Facebook is now attempting to create algorithms to prevent hate speech and have hired '*dozens*' of Burmese speakers for human review – NGOs argue it is too little too late (Kirby, 2018). One can therefore argue that one cannot rely on the social media providers to fix this problem, but what is needed is an educational and social change.

5.3.   Education and TVET in Myanmar

This subchapter will use document analysis to analyse education and TVET in Myanmar, and how they are found in society. Thus, the chapter will enable the problem recognition and following analysis to be based in precedent, and an informed decision-making process. The chapter is divided into 4 sections: 5.3.1 Historical Background, 5.3.2 The Education System Today, 5.3.3 TVET in Myanmar, and finally 5.3.4 Systemic Factors.

5.3.1. Historical background

Education in Myanmar have gone through several phases only in the 1900s and until today (Lwin, 2007). Pre-colonial times, Myanmar citizens would receive education from a traditional Buddhist school. As the British colonised the country, they changed the curriculum to suit their continuing rule of it. This is termed 'colonial education'. As independence was reached in 1948, the colonial education was reformed to a national one. This continued until the military coup of 1962, which again reformed education to the socialist tradition. This socialist education continued until the uprisings in 1988 (Härkki, 2017; Lwin, 2007).

The military is widely blamed in literature for the poor state of education in the country (Härkki, 2017; Hayden & Martin, 2013; Lwin, 2007; Tin et al., 2008). Before the coup, Myanmar was considered to have one of the better education systems in Southeast Asia (Tin et al., 2008). While part of the British empire, they held the highest domestic language literacy rate of any colony. Myanmar citizens were also among the highest educated populations in Asia and was used as an example to other Asian countries (Tin et al., 2008). Particularly the University of Yangon was considered an educational pearl, which attracted students from all over Asia (Härkki, 2017).

Socialist education under the military junta meant a near dismantlement of the previous educational system (Härkki, 2017). The newly nationalised schools saw an overall decline in results, particularly in the second half of the military regime (Lwin, 2007; Oxford Business Group, 2018b). Private schools of any kind were banned, with the exception of some international colleges (Härkki, 2017). While more schools were continuously being built throughout military rule, they did not invest in teachers' training, education or salaries (Tin et al., 2008).

The system comprised of the students choosing between seven subject groupings, containing science, arts, and a combination of both (Lwin, 2007). In terms of educational purpose, it was widely held under the socialist regime that one's education would equate to one's livelihood, and thus this purpose was implemented in combination with '*socialist moral values*' into the curriculum (Lwin, 2007, p. 14). These moral values did not, however, include equality of opportunity, as science subjects were elevated above all others. In order to gain status, and for ones child to be considered particularly intelligent, it became a familial goal for a child to attain a science based academic record (Lwin, 2007).

Christian schools were closed down, while Buddhist monastic schools where allowed to teach in rural regions (Lwin, 2007). Burmese was the only language state schools taught in every region and division, until the fifth grade where English was taught (Lwin, 2007). The end of every year students has examinations based on a pass or fail system. At the end of eight grade children were put in one of two categories according to performance: A-list or B-list. Only those in A-list could choose science options for high school, while those on the B-list were only able to move forward with arts (Lwin, 2007).

The new system was also centralised under the regime, which created a breeding ground for '*political indoctrination*' in schools (Oxford Business Group, 2018b). This has been a continuing problem all the while until today, as laws like the University Education Law of 1973 have yet to be properly dealt with (Hayden & Martin, 2013). This law strips universities of any autonomy on either the institutional or financial level. One saw instead that decisions on these levels were left to the Universities Central Council. Today, we then see that governance of universities and higher education in general is particularly challenging, as they have no capacity to self-govern (Hayden & Martin, 2013).

Student unions
Reform, and by some hailed as the beginning of the end for the military regime, began with the student unions revolt in 1988 (Win, 2015). These students were organised by Aung San Suu Kyi and included protests against the government. The results of the regime response were devastating on most every level. All universities were closed for two years and the Yangon Students Union, and the formerly prestigious Yangon University itself, was dynamited and destroyed (Win, 2015). Many were killed in the social unrest in the aftermath, as well as many arrested, which sparked sanctions from the international community (Salmi, 2013). Since, the university has become a post-graduate only school, and undergraduates were sent to universities in the outskirts to prevent mobilization (Win, 2015).

These where yet not the only consequences of the 1988 student uprising. As mentioned all universities where closed for two years directly after, but they were not reopened indiscriminately. Throughout the 1988-2000 period universities and schools were shut down strategically and periodically so as to further prevent mobilization among students. Members of the democratisation movement were also targeted for harassment and arrests, especially among faculty and the student body (Oxford Business Group, 2018b). This resulted in the UN's Human Development Index in 1999 finding that the average child in Myanmar would only have attended 7.5 years in school (Oxford Business Group, 2018b).

Yet another uprising was sparked in 2007, challenging the military regime on their policies' failure to uphold basic welfare (Tin et al., 2008). Young Buddhist monks were involved in mass, which led to it being called the 'Saffron Revolution'. The monastic schools were deeply involved, as they were the only alternative to the state-run schools which at the time, most could not afford to send their kids to. The Saffron Revolution can thus be viewed as a society revolting against a failed welfare state (Tin et al., 2008).

There are thus significant events in near history where student unions, and the education sector in general, have made significant impact on the governing regime. It is therefore perhaps not surprising that student unions are still a contentious topic in Myanmar. While the NLDs assumption to power in 2011 has opened for collaboration with the international community, local students are still unsure of their ability to contribute to student life in a political sense (Salmi, 2013; Turner, 2017).

As all student organisations are illegal, one is dependent on having an understanding with the faculty at the university. Indeed, while the National Education Law was passed in 2014, after NLD came to power, they have not granted freedom of association or freedom of political expression to university campuses. Thus, the students must decide on whether to fight for political issues illegally or reach an agreement with faculty on the promise to not engage in political activities. The student union of Yangon Technician University has agreed to the latter, as Vice President Htet Naing Oo is quoted as saying '*we don't want to take part in political issues, and know it is our duty to control the students from doing so*' (Turner, 2017).

Even so, one finds student unions at most universities throughout the country (Turner, 2017). Thus, the involved students are walking on a thin line, trying to please the requirement of no political activism while addressing the needs of the student body. The student union leaders of the University of Information of Technology were indeed expelled for this reason, as they were suspected of doing activism (Turner, 2017). Me Me Khant, the expelled former leader, said that: '*I just wanted a better library and some extra-curricular activities, but when the school discovered two members were involved in protests, they kicked us all out*' (Turner, 2017).

There are exceptions of political student unions, such as the historic Yangon University, where they allow members to affiliate with political activism – outside the space of the student union. President of the Yangon University student union, Myat Tun Thein, said that '*We have no political demands. Members can be involved in Burma politics, but only as an individual. Here, we are only about education reform*'(Turner, 2017).

However, the main challenge to student unions today is apathy from the students themselves. There is simply a lack of interest in political issues, even regarding matters of their own education. Thoon Htike San, the Public Relation Officer at Yangon University student union argues that the students are pressured from their families and community to simply focus on studies, and keep their heads down (Turner, 2017).

5.3.2. The Education System Today

Most basic education centres are run by three ministries: the Ministry of Education (MoE), the Ministry of Religious Affairs, and the Ministry of Social Welfare, Relief and Resettlement (MSWRR) (MIMU, 2015). MoE runs the 44 000 basic education state schools, in which there are over 8 million students studying, which again are taught by 280 000 registered teachers. The Ministry of Religious Affairs run 1429 registered Buddhist monastic schools, as well as schools run by other religious affiliation, and various other educational programs. MSWRR's responsibilities lay in day-care centres, mother circles, pre-primary, special disability schools and nurseries (MIMU, 2015).

The universities are run by no less than 12 different ministries, which all run the 169 universities in Myanmar. These are all publicly funded, although reform is opening to private universities. MoE is in charge of 47 of these universities, and teach students in fields like arts, science, foreign language, teacher training, economics and distance-education (Chipperfield, Galván, & Broadhead, 2014). The Universities Central Council still exist, and is chaired by the Minister of Education, who also chairs and runs most all other deciding bodies within university considerations (Hayden & Martin, 2013).

As a management system, education is thus based on a top-down system of decision making (Hayden & Martin, 2013). Principals function as managerial administrators, and compliance to the expectations of MoE are valued above educational achievements in the local community (Hayden & Martin, 2013). A '*passive indifference*' is prevalent in management and among faculty, which enables problems and issues to fester. It is also difficult to reward performance, or discipline either the administrators or under-performing teachers (Hayden & Martin, 2013, p. 52).

In basic education, there is a so called 5-4-2 system in place (Lwin, 2007). This means that basic education encompasses 11 years. Education begins when the child reaches five years old (Tanaka et al., 2015). Five years are given to primary school which is compulsory and includes

kindergarten. At this stage children are taught writing, reading and maths. However, Hayden & Martin (2013) argues that pre-school is not efficiently integrated into the school system. They found that only one-fifth of those eligible to attend did so, the statistic worsening the more rural the children where.

Next children come to a four year middle school, before finally completing the structure at two years in high school (Lwin, 2007). The international standard would require another year of high school, so that the they completed 12 years of education (Tanaka et al., 2015). The system has a set of guidelines in how many hours should be spent on each subject, as shown in figure 9 below. This framework has not changed since military rule except for the soon-to-be-implemented reforms, and is free to attend (Lwin, 2007).

Lower Secondary-Level Course of Studies

Subjects	Periods per week
Myanmar language	5
English	6
Mathematics	8
General science	4
History	4
Geography	4
Moral education	1
Physical education	1
Arts education and co-curricular activities	2
Total	**35**

Note: each period lasts forty-five minutes.

Upper Secondary-Level Course of Studies

Subjects	Periods per week
Myanmar language	5
English	5
Mathematics	5
Co-ordinated science	9
Social studies	6
Moral education	1
Physical education	2
Arts education and co-curricular activities	2
Total	**35**

Note: each period lasts forty-five minutes.

Figure 9: Hours required by students (Hallak & Poisson, 2000).

There are some significant challenges on the administrative level. While there are national guides from MoE on curriculum and educational framework, there is no system to quality assure schools or education provided to students in general (Hayden & Martin, 2013). There is no framework which describes the standards they expect of teaching quality, learning, or management of the school (MoE, 2016). While there are inspectors which are supposed to

support and maintain the schools, they are more concerned with assuring that schools comply to MoE regulations and policies (Hayden & Martin, 2013).

There is also no framework which states the higher education and TVET qualifications standards on a national level. There is therefore difficult to assume what skills and qualifications one attains from receiving a degree, and they are highly varied across the country. While such a framework has been discussed many times, it has yet to be implemented or even developed in an operational form (Hayden & Martin, 2013).

Monastic Education

The main alternative to public state schools is attending a monastic school. These, while under the Ministry of Religious Affairs, do not receive support from the government to function, but are instead entirely dependent on alms from the community (Lwin, 2007). Only Buddhist monasteries are allowed to teach, other religions such as Christian and Muslim communities are barred by the government with few exceptions (Lwin, 2007). This does provide financial challenges to teaching, with the main barrier to improving educational outcomes being named a financial one (MoE, 2016).

While public schools are also free, monastic education is seen as the alternative for the poor. The curriculum is the same as the public schools, but they might also give children living space, food, and '*enable them to become culturally refined citizens*' (MoE, 2015, p. 13). In 2016 over 300 000 students were registered as attending monastic education country wide (MIMU, 2017). Only 12% of these were training young nuns and novices, while 88% came from outside the monastic order. Most, 72%, attend the 1-4 range primary education section, and 44% of all registered students can be found in the cities of Yangon and Mandalay. This is an 22% increase in total students in monastic education during the 2012-2017 period, mostly caused by social unrest in ethnic states (MIMU, 2017).

The schools are established and run by monks, and until 2014 they functioned with little government oversight or support (Burnet Institute, 2014). Consequentially, when the Burnet Institute & Monastic Education Development Group did a baseline study of the conditions across Myanmar, some concerns were raised. However, as they note, the study should be interpreted with caution, as it might not reflect the highly varied and inconsistent nature of monastic education in Myanmar (Burnet Institute, 2014).

Recordkeeping, student and staff affairs, as well as financial management was generally done in an informal inconsistent manner, with no minimum standards. Information regarding disabilities of students were not collected in a routine manner (Burnet Institute, 2014). Additionally, assessment of student performance was inconsistent in all schools, and physical punishment was prevalent (Burnet Institute, 2014).

Monastic schools found it difficult to retain and recruit teachers, as they must compete with salaries they cannot match from the public schools (Burnet Institute, 2014). In fact, 14% of teachers were not paid at all, of which 28% were monks. 82% of teachers were women, and most faculty had been introduced to child-centred pedagogy approaches. Most could find issues which made them unable to implement it however, like lack of time, classroom space, training and materials. Further, they found that although 60% of teachers had university degrees, very few had teacher qualifications (Burnet Institute, 2014).

More generally and historically speaking, monastic education has always been an important aspect of education in Myanmar (Tin et al., 2008). As mentioned it was the main form of education pre-colony times, and they also were an important part of the Saffron Revolution. Their education system has been mostly non-formal and lifelong learning based, and represented '*the unity of life and religion*' (Tin et al., 2008, p. 156). They therefore do not just represent an alternative to the public schools, but as one in and of itself, a complementary model for education where basic skills are also attained (Tin et al., 2008). Some students therefore attend monastic education upon completing primary level in public school (Oxford Business Group, 2018b).

Private schools

While illegal under socialist rule, the private education sector has been opened since the Private School Registration Law was passed in 2011. After this, private schools were allowed if they followed national curriculum. In 2015 there were 159 schools which had opened in 10 Regions and States. The students tend to be at high school level 58.1%, then middle school level at 27.2%, and finally only 14.7% are in primary education (MoE, 2015). It has been argued that in terms of law the private education, particularly higher education, is moving much faster than the public education sector (King, 2013).

Private schools represent positive and negative effects to the education sector. The average teacher-student ratio is 15 to 1, and so students tend to get more time with their teachers in private education (MoE, 2015). However, these schools are expensive, and in most cases only

the wealthiest in Myanmar society can send their children to it. Thus, it further widens the social barriers to get out of the cycle of poverty (Lwin, 2007). Further, these schools tend to focus on mastering English, by which parents hope to be able to send their children abroad to continue attaining education there – and so sending skilled students and future labourers abroad (Lwin, 2007).

Even so, it can be argued that this expedited legalisation process is done to retail these students which demand an international standard education. Many wealthy families have sent their children to Singapore, Australia, the US or UK in order to obtain this already (Härkki, 2017). Thus, it can be viewed as a recognition of the growing middle class (Tin et al., 2008).

On the other hand, there is a rising community of expat families, which are in Myanmar for NGO work, diplomatic missions, or business. Therefore, private schools tend to also teach foreign curricula, and courses which give college credits. These schools do however have absorbent fees, sometimes as much as US$26 000 for one year per student (Oxford Business Group, 2018b). Schools like the British International School is capitalising on the demand, building schools which will take inn over 100 students initially, but then expand to 1000 (Phyu, 2017). Containing foreign students this way, might only exasperate problems of isolation and poor quality in the public system.

University

The majority of universities are highly fragmented and communication and partnerships between them rare. Win (2015) argues that the entry requirements and indeed the amount of years needed for a degree varies from university to university. International partnerships are rare, although they have been attempted, the main reason of deterrence to the international community is bad infrastructure and lack of funding (noble solutions, 2017). Consequentially, there are very few students who go on exchange or travel, as well as few international students in Myanmar (Mackenzie, 2013).

Still, there is an impressive number of universities currently in the country; it is now mandatory for each state and region to have three higher education institutions or more. However, this quantitative achievement has left quality behind. There is little control of what skills and qualifications a graduate has upon completing their degree (Tin et al., 2008). Concerningly, although this proliferation is impressive, it is also the case that most every university is highly specialised. This means that most universities will have their specialisation in a subject, that being forestry, medicine, computer science, languages or similar. Thus, it might make it

difficult for students to freely choose their academic direction, provided that the university closest to them does not specialise in their needed degree (Hayden & Martin, 2013).

While socialist education has been officially ended by the NLD government, its effects are still felt in the educational choices of youth today. Science and engineering students are lauded and their slots competitive, there are few alternatives for the arts (OECD, 2014). As was described, under the socialist regime science was held above all other subjects, meaning that arts were for those less able to achieve academically. This sentiment still is found today (Win, 2015). Further, there are only two pure 'arts' programs in Myanmar, in which only 200 students are enrolled (Johnston, 2018). Cultural and social expression can thus be argued not to be an academic priority.

A significant aspect of the Myanmar education system is its sheer number of distance students (King, 2013). Having passed the matriculation exam, students can choose freely between being enrolled as day or distance students according to their marks (Win, 2015). While tradition in Western countries demand most students to attend face-to-face lessons, if this was the case, it would not be possible for rural or poorer students to attend university at all (King, 2013). Most distance educated students in Myanmar thus are simply financially unable to take time off to study most days in a week (King, 2013). Day students are also required to partake in long commutes from their dorms or residential areas to university campus, an at times financially challenging requirement (Win, 2015).

Financial considerations are thus very important for ones' choice between day and distance education. However, it has been made note that the distance education system is highly ineffective as a learning system (Win, 2015). Those with distance degrees regularly have to take extra classes in computing, language and further technical courses, in order to be employed. Win (2015, p. 7) argue that '*students do not receive any qualifications or skills except the degree certificate*' from distance education.

There is also evidence that suggest that distance educated students rarely go on to take more advanced higher education than an undergraduate degree, leaving masters and PhD courses to the day students (Win, 2015). One reason for this, might be that distance students do indeed only want the degree certificate. They wish to spend as little time and money on the degree, so that they can continue to work (King, 2013). Many do this as they have to work to ensure their family merely survives (Win, 2015).

Private tuition

One can find private tuition as an institution on most every level of Myanmar education (Tin et al., 2008). They can be set up as learning centres, based on community building and as non-profits. These are often run by NGOs or individuals such as university students and tend to be free or low-cost (Tin et al., 2008). Their programs focus on understanding English, and thus being able to pass exams. However, the teachers and trainers at these centres are often unqualified, meaning that their teaching can be in the worst cases counterproductive. With huge classes of up to 100 students at once, the teachers focus on rote learning practices. Often there is no distinction between year level, while teaching (Tin et al., 2008).

These are however the affordable alternative for poor children to traditional private tuition. Teachers are generally badly compensated for their work, meaning that they find ways to supplement their salaries through private tuition. As Tin et al. (2008) contends, one can thus see that the line between the State, civil society and corruption become ever more blurred.

The most concerning cases are found to further blur this line, as they have simply stopped teaching relevant subjects in their school hours. The parents are thus required to pay for private tuition for their child to attend, simply for them to be able to learn the relevant material of the curriculum. If they do not, the child will not know the subjects tested in the exam. Further, some teachers will give their paid private tuition classes handouts relevant to what the exams are based on (Tin et al., 2008).

Attending private tuition has thus become a common aspect of the education system in Myanmar, to a worrying degree. Tin et al. (2008) describes a family where their 10-year-old child was required to spend their whole day in class at public school, they then in the afternoon attended paid for private tuition, before being sent in the evening to a free private tuition course. These evening courses might start as late as nine or ten at night. It is fair to question the 10-year-olds retention ability after doing this dance every day, especially when one factor in the potential for inadequate teaching (Tin et al., 2008).

5.3.3. TVET in Myanmar

So far, TVET has hardly been mentioned as a factor in Myanmar – with reason. A key aspect needed for further development, is the introduction of productive TVET educational alternatives. As foreign companies are quick to point out, and already discussed above, there is a huge shortage of skilled individuals in traditional TVET fields (Tin et al., 2008). Particularly this is the case in management, English and project-oriented work. This worry is further

amplified by the fact that younger work applicants tend to have lower educational levels, indicating that the education system is eroding ever presently (Tin et al., 2008).

Official numbers suggest that there are over 370 TVET centres in Myanmar in 2015, compared to 225 000 day students and 411 000 distance students in universities (Oxford Business Group, 2018b). The academic TVET courses are mostly run by the Ministry of Science and Technology (now a subset of MoE), and are numbered at 61 facilities (noble solutions, 2017). One such TVET class is run as a Skill Training Centre, where they provide courses in a few select skills. These are, however, geared towards teaching people who wish to work abroad (OECD, 2014).

There is also a shortage of skilled workers in the manufacturing industry, which is blamed on the fact that university-industry partnerships are too rare. The current curriculum in schools and universities do not emphasise TVET skills or generally practical abilities (Japan International Cooperation Agency, 2013). This lack of university-industry partnership is perpetuated further by the industries indifference to establishing partnership bonds to the universities. While as stated above many companies found themselves having labour shortages, only 4% of businesses responded to this by reaching out and strengthening bonds to universities to secure skilled workers in the future (OECD, 2014).

The skill shortage and its worrying near-future is particularly clear when one looks at TVET enrolment statistics. Only 0.5% of upper secondary students were attending TVET programs in 2014, and there are even fewer opportunities for adults wishing to attend such programs (OECD, 2014). While there is no reliable statistics on TVET program completion rates, it is widely cited in literature that it is less than 50% (Hayden & Martin, 2013). While these statistics are worrying enough, it is also a concern that the Myanmar population is ageing past their years of productivity before they can attain the skills needed to continue economic growth. The OECD (2014, p. 31) argues that Myanmar's potential labour force, people between the ages of 15-64, will keep stable until 2035, at which point dependency will grow. There is thus a real ticking deadline for Myanmar to take charge of their labour force, and Myanmar does not have the time to allow basic education reform to take the brunt of the skills development responsibility (OECD, 2014).

The government in Myanmar have often pointed out this growing need, so the political will is there (UNESCO, 2013b). Yet, the TVET sector in Myanmar continues to be fragmented, socially undervalued and financially unable to sustain the needed reforms. This is especially true in rural regions, which might need TVET most (Hayden & Martin, 2013). Acting on this

recognition, the government began the drafting of a TVET law, which will define what measures and education falls under the category, and future plans. This lack of a unifying definition has continued to present problems on the managerial level, where ministries are unsure of which practices might qualify, and how to move forward (Tanaka et al., 2015).

The previously mentioned Ministry of Science and Technology was the main leader of TVET in the country, and have attempted to address the skills mismatch between graduates and industry (Tanaka et al., 2015). TVET courses by the ministry include higher education engineering bachelor's degrees, technical institutes funded by the government, technical colleges, and technological universities (Tanaka et al., 2015). Other ministries provide different courses, including the industrial training centres of the Ministry of Industry, or skills development centres provided by the Ministry of Labour, Employment and Social Security (Tanaka et al., 2015).

The ministries tend to have very different employment of TVET teaching, and definitions of what exactly it is. Some might simply provide training and skills development, while others have higher education degree programs (Japan International Cooperation Agency, 2013). For those who do not provide higher education programs, the TVET tends to be short-term and highly specialised training. Either way, it is a common theme for the training to have considerable weaknesses in terms of relevance of curriculum to the industry, materials available to teach with, and program design (Hayden & Martin, 2013).

Some notable programs run by MoE for TVET and lifelong learning includes the basic literacy summer courses for adults. This course taught over 46 000 adults during its 2014 program (Oxford Business Group, 2018b). For children which have left the formal education system, there are also primary education equivalence programs. When a child completes the program, they are qualified to re-enter the formal education system and partake in secondary school. (Oxford Business Group, 2018b).

The private sector is as mentioned in section 5.1.4. dependent on further training of their employees, which arguably makes them the most significant provider of TVET in the country. In addition to on-the-job training, there are also regular training courses from industry associations (Technical Assistance Consultant's Report, 2013). These professional and industry associations provide courses, training, conferences and seminars to further build skills among their affiliates. These are done both formally and informally. The training is aimed at bridging

the gap between what they might have learned from their degrees, and the skills needed to perform their work at a professional level (Technical Assistance Consultant's Report, 2013).

There are however concerns regarding access to TVET programs. In order to enter into the few TVET programs provided by the government, one must first pass the same matriculation exam taken in year 11, as for university and other higher education (Tanaka et al., 2015). Thus, TVET loses one of its main points, being an alternative to poor students which might be unable to pay the considerable fees of private tuition. Consequentially, only well-off applicants are able to attend TVET education, in a country where such training is considered less-than the other higher education alternatives (Tanaka et al., 2015). The fact that many of these programs are run as higher education degree attaining courses, also leaves challenges for access. These require the students to study full-time (Hayden & Martin, 2013).

Additionally, as these courses are quite new in nature, there is little information on whether they have a positive effect on employment (Hayden & Martin, 2013). This is further perpetuated by the fact that the private sector seems unaware of the existence of TVET courses, where it was found that most interviewed where simply unaware that they existed (Technical Assistance Consultant's Report, 2013). One can thus see that TVET is close to invisible in Myanmar society (Technical Assistance Consultant's Report, 2013).

Consequentially, the TVET sector does not have a good reputation in terms of quality, which again continues the social perception of TVET and trade skills in general as unprofessional work, or even unnecessary. The sector is seen as unnecessary, because often there is no difference in salary between those who do have TVET qualifications, and those who do not. The key qualification needed both in terms of salary and social status is a university degree (Hayden & Martin, 2013).

Tourism

Having been identified as a key sector for the future, tourism provides an appropriate sector to analyse the current state, and future need, of TVET in Myanmar (Noakes et al., 2017). Noakes et al. focused on tourism, by investigating the tourist guide sector. Their findings will be analysed to better understand how TVET can be implemented to support this growing sector.

As tourism in Myanmar tends to be characterised by small tourist groups traveling across regions, the tourist guide is particularly important to the sector (Noakes et al., 2017). It is therefore not surprising that the number of tourist guides with license has grown substantially the last few years. In 2010 there were a bit over 4000 licensed guides, while in 2015 this number

had come to over 5600, an increase of 38%. The trend is expected to continue, with the growth rate only gaining (Noakes et al., 2017). However, even the optimistic forecasts of how many tourist guides will be licensed by 2020, of over 16000, it will not meet demand which by then exceed 17000.

There are deterrents for those who wish to engage in the industry, despite its growing need. These include frequent and persistent government controls, corruption, underdeveloped economic policies and financial system, poverty in rural areas, and expectedly, inefficient skill development. This puts exceeding pressure on the tourist guides themselves to be '*micro-entrepreneurs*' (Noakes et al., 2017, p. x).

As the tourism sector is highly reliant on personal referrals, the skills of the individual tour guide are incredibly important. There is a large need for guides which can give accurate and culturally sensitive translations. Language skills are especially important to the industry after the opening of the country (Noakes et al., 2017). Myanmar being a popular tourist spot is hardly surprising, as the country contains a varied mix of beaches as well as cultural, religious and historically important sites. There are also relatively cheap flights from all over Asia, pertaining to its strategic location (Technical Assistance Consultant's Report, 2013).

Noakes et al. (2017) found that in 2015, there were a total of 1 301 583 tourists in Myanmar, where 72% came from Asia, 16% from North America, Australia and New Zealand, and 1.19% from Europe. This is a significant increase from 2012, where tourists totalled only at 933 910 (Technical Assistance Consultant's Report, 2013). While impressive, this suggests a growing need for language and cultural skills simply not found among tourist guides. Table 6 shows that 2 349 guides specialise in English language, while the Asian languages like Thai, Chinese and Korean only have 150, 123, and 26 respectively.

Table 6: Number of tourist guides according to language specialisation in 2014-15 (Noakes et al., 2017).

Language	2014	2015
English	2 296	2 349
Japanese	384	352
French	282	278
German	268	261
Thai	138	150
Chinese	131	123
Spanish	110	106
Russian	69	66
Italian	68	64
Korean	30	26
Regional Guides	1 070	1 855
Total	**4 846**	**5 630**

Indeed, there is a considerable gap between market needs, and the skills training the tourist guides have. In addition to language, the study also found that there is a shortage of guides who specialise in in-demand activities, such as trekking guides, nature and culture. This again means that training must be given by the tour operators who hire the guides on a project by project basis (Noakes et al., 2017). This is thus a very clear example of a mismatch not just between the skills tour guides gain from training and what they need in their work, but also between the curricula itself and market needs.

5.3.4. Systemic Factors

The previous sections of this chapter have identified several areas of education and TVET in Myanmar, their history, negatives and positives. In this section the underlying factors of these will be discussed. This section will thus consider how the situation has reached this point, and thus establish sociocultural precedent. The section will analyse a range of themes: funding, teaching, admission, curriculum, English language, literacy, assessment, student retention and attendance, and lastly child labour.

Funding and financial factors

As mentioned in section 5.1., there is a notable low amount of public spending in the education sector. The current education budget is far too low to be able to finance the education sector as it is, and as it is envisioned for the future (Hayden & Martin, 2013). Additionally, separating universities by ministries creates funding problems, as the more well-funded ministries are able to provide better for their universities, than those less favoured by the government budget (Tin

et al., 2008). Consequentially, one can find inadequate infrastructure on every level of the education system (Hayden & Martin, 2013).

In the rural areas, where public schools have yet to be built, it has become the responsibility of the local community to do so. These are termed as community-based schools, and are essential in order to provide primary education to village children (Tin et al., 2008). Often these schools are unable to acquire qualified teachers, and one is chosen among the community members. Community-based schools are often religious, and tend to be claimed by the local state officials as off branches of their own education network (Tin et al., 2008).

Generally, one can find a lack of resources to be a returning theme. This can be physical infrastructure, as mentioned, as well as a lack of printed handouts, unavailability of curriculum, or derelict libraries (Technical Assistance Consultant's Report, 2013). Libraries, where they even exist, generally need to be restocked, and updated to include modern information. Laboratories are also in need to be reequipped, and there are few school-based internet access points (Hayden & Martin, 2013).

The lack of funds to hire and retain teachers also creates significant issues. Firstly, classrooms are generally overcrowded in highly populated regions where the teacher-to-student ratio is at 1 to 28 in primary level and 1 to 34 in secondary school (Härkki, 2017). Secondly, the low salary for teachers ensures that the most capable graduates choose different professions. Notable here is the patriarchal nature of Myanmar society where men are expected to be the sole providers of the household, meaning that they cannot see a teaching career as an option. Thus we see many more women than men in a teaching career (King, 2013). Thirdly, then, is the fact that this economic situation creates an incentive for the teachers to run private tuition classes (Hayden & Martin, 2013). There are cases where this problematic practice is also enabled through bribes paid by parents to teachers, in order for their child to gain marks (Lwin, 2007).

Another issue which is created from this, is the continuous rotation of teachers. The practice is detrimental to learning quality and continuity, but often schools will not have any choice because of their tight budgets (Mackenzie, 2013). The situation is not helped by the fact that teachers' performance evaluations are done by themselves. Thus, there is incentive not to fail students, as well as look away when students do not attend classes (King, 2013).

Another aspect which creates a barrier to education attainment, is the personal cost to the household. While attending lectures itself is free, there are other costs which give considerable

risk to the household. The student or family has to buy handbooks and guides, and at university level there's a practice of hiring graduated or older students as guides (Mackenzie, 2013). This could explain the Myanmar student's preference for distance-education. The high expenses of living close to the university, commuting as well as covering meals, means that even those with the grades to attend day school might opt for distance-education classes (Mackenzie, 2013).

On top of this, comes the practically mandatory private tuition, fees for cleaning the school, as well as the pensions of the teachers. One estimate show that a year of education can set a household back 125 000 kyats, in addition to the 800 kyat formal fee for entering the school (Mackenzie, 2013). Hayden & Martin (2013) found that private tuition in Yangon or Mandalay can cost over US$250 a month, a cost which is then shared among the class. This is especially high when considering that the average monthly salary is at 100 000 Kyat, or US$74 (11/06/2018) (Phyu, 2017). It is thus not surprising that private tuition makes up the highest household expenditure on average for education (Spohr, 2016).

Teaching

Perhaps the greatest issue found in literature, is that the key teaching methodology is rote learning. This has not changed since the system was introduced in the 1940s and 50s. Pertaining to poor salaries, there is also little incentive for teachers to develop professionally in this regard (Hayden & Martin, 2013). A Myanmar teacher is paid below or at the national average wage, of 90 000 or 100 000 Kyat a month (Phyu, 2017). Their low salaries are also indicative of the little support that exists for teachers on a public basis, and as MoE themselves argued in 1992 – quoted by Hayden & Martin (2013, p. 55) – '*When teachers are under-motivated because of low pay and poor career prospects, even the very best teacher training will not do much to improve teaching*'. Consequentially, we see that a high number of Myanmar teachers who gain tenure overseas, refrain from returning home (B. A. Moe, 2017).

Reflecting Myanmar society at large, one sees that classrooms have a top-down, passive structure (Ulla, 2017). One can find the roots to this behaviour in Buddhism, Confucianism and their recent socialist past (Tin et al., 2008). These philosophies argued for respect as well as devotion to parents and teachers. Consequentially, teachers are viewed as one of the 'five gems' of society, and on the same plane as Buddha – who was a teacher himself (Tin et al., 2008). Teachers are thus like substitute parents during the child's stay in school, and this social hierarchy is incredibly rigid. In fact, it might even be seen as inappropriate for students to expect to be included in decision-making regarding educational matters (Tin et al., 2008).

In the classroom, a teacher is thus a highly authoritative figure, and students attain the role of a passive and disciplined observer, rather than a participant (Lwin, 2007). As a group, faculty also hold highly traditional and conservative views, who tend to resist attempts at change (Tin et al., 2008). While there have been official training given from MoE to teachers in child-centric approaches, which would move away from the rote system currently in place, the teachers returned to their old ways upon leaving the training (Tin et al., 2008). It is thus argued that teachers must be better trained also before they begin their teaching, as well as during their employment, in order to change the teaching methodology (Tin et al., 2008).

This emphasis on the need for teacher training is not without bounds, as mentioned, there are quite a few instances of teachers practicing without any qualifications (Lwin, 2007). The teaching methods for teachers are, as the methodology they themselves use, repetitive rote learning (Tin et al., 2008). Some teacher trainers are in fact themselves without the training to do so (Ulla, 2017). There is thus a rising concern that the quality of teaching is insufficient because of the lack of professionalism among teachers (OECD, 2014).

In order to teach primary school, teachers only need to attend a one year program, while secondary school teachers take a two year course, and high school teachers are in training for 5 years (Japan International Cooperation Agency, 2013). There are also no leadership training available for those who wish to take managerial positions (Japan International Cooperation Agency, 2013).

It is thus fair to say that in Myanmar education, primary school teachers do not hold the same status as say a high school teacher. When a teacher from primary school is promoted, this often entail them moving to the secondary school and attaining a higher salary (Lwin, 2007). Primary school children are therefore often taught by highly inexperienced teachers, even if they do have official teacher qualifications (OECD, 2014). Thus teachers must be trained even after having worked in the sector for a year or more (Lwin, 2007). It is therefore easier for teachers to simply continue the cycle of rote learning, performing their teaching based on their own teachers and the ones around them in the school (Hayden & Martin, 2013). This has caused detrimental results to primary education, as about 9% of year 3 students are unable to read even a single word (World Bank, 2017).

Admission

Enrolling in university requires one to pass the year 11 matriculation exams, and the marks by which one gains there, are used to apply for university. There are very few students who choose

94

to study subjects like marine biology, forestry, or agriculture (Japan International Cooperation Agency, 2013). Subjects like medicine, computer science, and engineering are more difficult to gain admission for (Lwin, 2007). Especially, this is the case for female applicants, which must have higher marks than males in order to attend the same courses (Win, 2015).

Minority and rural youth are particularly at risk for not passing this crucial exam, and thus being unable to attain either a university degree or TVET education (Spohr, 2016). Day student tracks require a generally high mark from the matriculation exam as they admit students per quotas. Distance students however, have no such quota, and are therefore generally admitted to the courses available. Consequentially, students, teachers and households become more concerned with the student passing the exams, rather than what they are actually learning (Lwin, 2007).

Curriculum

As with the dominant teaching methodology, Myanmar curriculum has been stagnant since it was first created 40 to 50 years ago. The entire curriculum for a subject, either in university or lower, is a single 'sacred text', which at university level is entirely in English, which is memorised using the rote learning system (King, 2013). The handbook is a collection of important facts pertaining to the subject name, and subject of study (Lwin, 2007). While this approach to the curriculum is the norm, there is in fact a large resource library which should be available to the students, including CDs, study guides and textbooks. However, as the schools lack resources and methods to implement these, they are left unused (Mackenzie, 2013).

The curriculum itself is decided by centralised decision-makers, without any involvement of the private sector. There are therefore little knowledge of how the curriculum will be used in practice, or what needs the labour market has (Technical Assistance Consultant's Report, 2013). There are also no regard for local needs, either in terms of academia of the private sector, as everything is done centrally (Hayden & Martin, 2013). The central decision-makers might have previous knowledge of the industry in which they are developing a curriculum for, but this tends to be outdated knowledge (Technical Assistance Consultant's Report, 2013). The only revision to the curriculum was 15 years ago, which itself was merely a correction of the English (Japan International Cooperation Agency, 2013).

There is therefore no academic culture which encourages the use of libraries, or other sources than that of the 'sacred text', a practice evident in the curriculum of distance students. For these students, they are only required to attend ten days of lectures just before the exams. The 'sacred text' is thus so essential, that teachers themselves are not important to pass exams. Day students

have noted that if there were no roll calls at the beginning of class, they would not attend lectures. Further, they contended that '*they got a degree, but didn't know anything'* (Mackenzie, 2013, p. 14).

Analysis or evaluation of the material is thus not part of university education in Myanmar. Thus it is generally accepted that they are not taught critical-thinking skills, application of knowledge or to be critical of sources (Win, 2015). For a country in rising need of skilled labour to develop and sustain their economic growth, this is not promising. B. A. Moe (2017) gave a particularly condemning example of the lack of applicability of Myanmar curriculum; his friend, who was a civil engineer from university, attained a job in Singapore at a construction firm in 2014. While he initially looked forward to his work, it was clear very quickly that the techniques he had learned in Myanmar would not be applicable in Singapore. For during his degree in Myanmar he had learned techniques to build with bricks, while in Singapore they most only work with steel (B. A. Moe, 2017).

Moe (2017) further contends that the issue is just as pertinent in high schools. In maths at this level, one finds that the chapters are treated as separate aspects. Thus, each chapter stands on its own rather than be part of building an understanding of maths. The test questions are also argued to refrain from testing concepts from the stand alone chapters (B. A. Moe, 2017). Considering these critiques, one can understand the fact that many who leave school, on every level, do this simply because of '*lack of interest'* (MoE, 2016, p. 100).

The problem is further exuberated by the fact that there's no system for curriculum review. For an employer there is no other way to see the achievement of the individual except by the matriculation exams, which is done on a pass-fail basis (Win, 2015).

English language

English as a subject, which was removed from the curriculum during the socialist military era, is an ever-present powder keg in education discussions (British Academy, 2015). As the military junta wished to separate themselves from the colonial rulers, they discouraged English language in the curriculum after 1964. English thus markedly deteriorated both among students and teachers (British Academy, 2015). In the 1980s, the language was again introduced through textbooks and lectures, and by the 90s English as a teaching language was again widespread (British Academy, 2015). In order to make up for the deterioration, the teachers were given English refresher courses. However, as English became more institutionalised, the emphasis on rote learning became more pervasive (British Academy, 2015).

As students are taught to merely memorise the curriculum, rather than understand, there is a significant concern that they must memorise this information in a language the majority is not proficient in. The proficiency problem is found in both high and low performing university students. One can find classes of students with high academic achievement, where the textbook and PowerPoint is in English, but the teacher conducts the lecture in Myanmar language (Mackenzie, 2013).

In high-level conference discussions, such as the British Councils cooperative initiative with MoE and the Myanmar government to promote education reform, English at this level is argued in a positive manner (Mackenzie, 2013). This is because English is seen as the academic 'gold standard', which enables researchers greater access across borders and for research to be discovered internationally. King (2013) is critical of the English language policy, arguing that there have been too many great shifts in position towards the language in recent memory.

In combination with the emphasis on the 'sacred texts', the language issue further amplifies the issues of education quality and skill retention. While one single text is the curriculum text for a subject, it is in fact the handbook or study guide for a subject, also in English, which becomes key for the students to memorise. This is true both for day and distance education students (Mackenzie, 2013). These are memorised to the letter if possible and are identified by the students as the relevant guide by the subject discipline name, the year, and the name of the university. These handbooks summarise the important aspects of the curriculum, and makes the textbooks themselves as well as additional library references, irrelevant (Mackenzie, 2013). In fact, the students are in most cases unable to read the textbooks at all, as they are too difficult (Mackenzie, 2013).

The lack of proficiency in English thus further perpetuates the 'culture of learning' in Myanmar, which can be described as highly minimalistic (Mackenzie, 2013). This emphasis on minimum effort for maximum reward is a key reason for the education systems stagnation, and its indifference to change. Introducing libraries, internet access, and other such resources is ineffective in such a system. The New Highway project argued that the teachers and students simply did not know how to use these resources, while Mackenzie (2013) argues that it is part of a larger sociocultural education environment. From the point of view of the students, the system works well as it is relatively low-cost, low-effort and by little time spent, they attain a degree, particularly if one enrols in distance education (Mackenzie, 2013).

Even still, most officials and Myanmar domestic literature tends to argue that English language as mandatory at university level, is a positive aspect. B. A. Moe (2017) who as mentioned wrote passionately about the issues of the Myanmar education system, argues with equal passion for the importance of English language. He argues that '*English is the language of science and technology. It is also the language of the internet. If you have a good command of English and a good internet connection, you can educate yourself*'.

However, the English training and skill retention itself does not suggest that they enable graduates' proficiency. B. A. Moe (2017) surveyed graduates who applied for employment under Consult-Myanmar. Eleven applicants were shortlisted, out of which ten could show certification of having completed one or more English language courses. They were asked to take a simple English test. Before they did so however, they rated their proficiency, where one said they had 'excellent' proficiency, three said they had 'good' English abilities, six put themselves at 'fair' and only one said 'basic'. The results were that none attained a perfect score, despite Moe (2017) arguing that the text was '*pretty easy*'. Every applicant struggled with open-ended writing and were only able to write three or four sentences, which were rife with grammatical errors. One can thus question the quality of English language education in universities, but also the private tuition and private courses which provided certificates to the applicants (B. A. Moe, 2017).

MoE have attempted to recognise and alleviate the situation by providing Myanmar summaries at the end of the subject textbooks, for distance students (Mackenzie, 2013). While this might alleviate some of the issues of students being unable to understand the text, it does not help in subverting the toxic education environment. It is also important to note that each university can choose by law whether to teach in English, Myanmar language, or a combination of the two (British Academy, 2015). This has perhaps further amplified the problem, as it perpetuates that the teacher lectures in Myanmar, while all resources are in incomprehensible English for the majority of students (British Academy, 2015).

This is not meant to paint a picture of a country without English language skills at all. The language is quite common in cities such as Yangon, where English can be found on street names and in the everyday language of the people (British Academy, 2015). Even where Myanmar language expressions exists, they might opt for English terminology and slang. In terms of electronics, it is also rare to find Myanmar scripts available, meaning that one must use Latin characters (British Academy, 2015). All government documents as well as national passports

are also all in English. It is argued that this perhaps comes from the country's colonial history, where '*nothing is truly "official" or "valid" unless it is done in English*' (British Academy, 2015). English is also considered *the* universal international language, meaning that Myanmar needs to become proficient in it, in order to catch up for its years in isolation (British Academy, 2015).

Myanmar is thus a very different post-British colony compared to its Southeast Asian neighbours in Singapore and Malaysia (British Academy, 2015). The older generation remembers the colonial education they received, and thus have adequate proficiency in English. For the younger generation, which has seen major shifts in English as an aspect of their society, their proficiency is not as sound (British Academy, 2015). It is therefore key for the development of the education system for the government to make a clear plan of whether to move away from all-encompassing English language, or establish better language training practices throughout the education system (British Academy, 2015).

Literacy

As an aspect of society, literacy is highly important in Myanmar. In fact, according the Myanmar government, literacy in the country is at over 90%. This is one of the highest rates in the entire Southeast region (Rockett, 2013). This is slightly higher for men than women, 93% and 87% respectively, but according to available data literacy among women is growing (Ministry of Labour, 2017). There is also little difference among urban and rural citizens, where the urban has a literacy rate of 95%, and the rural 87% (Ministry of Labour, 2017).

The trend has thus continued since the colonial era. Rockett (2013) describes a society where bookstores as well as book-lending shops can be found on nearly every street. News magazines and book clubs are popular pastimes. The book clubs are sometimes ran by libraries like the British Council Library, and the American Centre (Rockett, 2013). There is thus precedent in society for including libraries and such resources in educational programs.

Assessment

As examinations are the only real proof of qualification awarded students, it is not surprising that the entire system is built to enable the students to attain high marks, or simply pass (King, 2013). These exams are not particularly challenging but require the students to have memorised the handbooks and to reiterate it (King, 2013). Even still, there are high failure rates among students, which again encourages teachers to only give guidance on what will be on the exam, while students are inclined to only learn what they will be tested on (Hayden & Martin, 2013). For the parents, who as stated above give financial support to the school as well as the teachers,

judge the teacher's performance based on their childes success in these exams. The same is true for school administrations' view of their teachers. Teachers are thus under enormous pressure for their students to pass the exams (Hayden & Martin, 2013).

There is thus a need for examination and assessment reform, which is based on capacity building (King, 2013). The current system is argued by Hayden & Martin (2013) to be wasteful to the human capital one could have attained. This system, they argue, is better equipped to find students able to pass them, then students' attainment level, talent or real knowledge. It is also inequitable for society, as the students who tend to be able to pass are from the higher social classes, which can afford private tuition (Hayden & Martin, 2013). Lwin (2007) argues that many students will simply cheat during the exam, or buy marks after it is completed, and thus are not required to learn anything to pass.

Notably, the NLD had already in 2013 recognised the prevalent issues in the examination system and have given recommendations for the education sector to avail them. Here they argue for the sector to move away from rote learning, and reform on every level of the education sector. They also argue that students should be assessed by their work, and the quality of their research (Mackenzie, 2013). In terms of how this should be done, the NLD report stipulates that in secondary education schools:

> *'Teachers shall evaluate the capacity of each student and guide them to create impact. The teacher shall mentor the student and help develop self-study skills. Freedom of thought and freedom of academic expression shall be encouraged. Ideas and thoughts vary according to individual values and interpretation, and thus analytical and well-structured arguments shall be encouraged. Coherence and reasoning shall take precedence over 'right' or 'wrong.''*
> (Mackenzie, 2013, p. 14)

The NLD thus argues that child- and learning-centred methodology has already been incorporated into the education system (Mackenzie, 2013).

Student retention and attendance

The examinations also have a big impact on the students' ability to continue on through to higher education. As only a third of students pass the crucial matriculation exam, a considerable amount of youth are unable to apply and attain higher education, in either a university or TVET capacity (MoE, 2016). The matriculation exam is called the Basic Education High School Examination, which examine the students in a set of their six subjects, and the number of passing students have been much lower in the past; in 2012 only 34.4% of the examined students passed the exams (Hayden & Martin, 2013).

This is also concerning as only about 10% of students who enrol in primary education, which is obligatory, continue on to finish secondary education (Hayden & Martin, 2013). As secondary education is not mandatory, enrolment drops by 49% for males and 52% for females (Rockett, 2013). This is termed the five-year survival rate (Burnet Institute, 2014). Additionally, over half a million children from age 7-15 were reported as never having attended school, with this being an issue mostly in the rural communities (Ministry of Labour, 2017). This has ensured that by age 25, around 16% of the Myanmar population has never received schooling (Ministry of Labour, 2017).

If one is able to enrol into university, it is not necessarily so that one attends. For day students, the attendance requirement is 75%, however, it has been found that many attend for as little as 50% of the time (Mackenzie, 2013). This is a further consequence of the view that lectures, or indeed teachers, are unnecessary for learning (Mackenzie, 2013).

Child labour

As the dropout rates from education are so high, it is natural for the prevalence of child labour to be as high as it is. For a household, they must value the risk of putting their child through education, with all the costs which comes with it, or attain additional income from the child working (OECD, 2014). A third of children in Myanmar are in employment according to the UN, in some capacity (Phyu, 2017). Children are thus economic entities for the household, which further builds a barrier between education attainment and the poor. Many households send their children to work as indentured labourers, while the family receives six months of their salaries in advance, as well as the salary they may attain after these. One can often find these children working in teashops working day as well as night hours (B. A. Moe, 2017).

The legal age minimum for work is 14 years and there are restrictions on work hours for those under the age of 18, however this is rarely enforced (The Businesses of a Better World, 2016). The ILO found that in a single industrial zone, the Hlaing Tharyar in Yangon, children as young as ten to seventeen worked in every aspect of the construction site. They worked in shops, on the construction site itself, teashops, transport, restaurants, factories as well as in private homes. Many of these children began working in the industrialised zone before they had reached the legal minimum age, with the average starter age being at 13.82 years (The Businesses of a Better World, 2016). Globally, Myanmar is in the top ten out of 197 countries in the Child Labour Index, which sparked several Myanmar export sanctions (The Businesses of a Better World, 2016).

However, as enrolment in primary education is relatively high, it can be interpreted as that child labour is a result of the household survival-risk calculation, rather than a rejection of education (The Businesses of a Better World, 2016). Comprehensive and holistic education reform could prevent this issue from becoming more prevalent, or even diminish it completely.

5.4.   Myanmar Education Reform

As has been alluded to several times in this chapter, a comprehensive reform process is underway in Myanmar. The process began in the early 2000, and is to be implemented in the academic year 2017-18 beginning at the primary school level, the year this study encompasses (Nesbitt, 2016). One can thus have an optimistic view of the future, as the deep-seated issues as stated in 5.3. have been argued to be addressed in this reform. However, the process has been slow and ongoing since the NLD came to power, and as with the twelve-point financial plan presented for the NLD economic policies, there are reasons to be cautious in one's optimism.

The following section will present the government's view of education in Myanmar, the key aspects which the government wish to reform, as well as the reforms currently taking shape. By doing this, the study will be able to consider the education sectors plans for the future in its analysis, giving the recommendations a long-term foundation.

5.4.1. The Government

Education reform has always been high on the NLD's agenda, and a key aspect of their running manifesto. Their main goals for the education system are democratisation and liberalisation (Chipperfield et al., 2014). These are further described by Raynaud (2017) as a process where the NLD will ensure that education becomes a catalyst for further change, through decentralisation, democratisation, federalism and peace. These are not just key to attain a stable society in Myanmar, but also to ensure an education system of quality. Education ensures informed citizens which can rebuild and continue on the progress made so far (Raynaud, 2017).

In order to do this, the government have reached out and strengthened bonds to international partners in the education sector (Chipperfield et al., 2014). They also created the Comprehensive Education Sector Review in 2012, which assessed education in Myanmar on every level, in order to make recommendations for reform. Generally, one finds the political will for reform and compliance to international standards, very high (Chipperfield et al., 2014).

This resulted in the 30-Year Long-Term Development Plans, which was again further developed in the National Development Plans. However, these plans tend not be explicitly clear or specific in terms of where accountability for the achievement of these plans lay. There is also

a relatively lose timeline, which could further create issues with implementation. Hayden & Martin (2013) criticises the vision which was provided by the government for the education sector '*to create an education system that will generate a learning society capable of facing the challenges of the Knowledge Age'* as being too lofty and disconnected from the real needs of the Myanmar education sector (Hayden & Martin, 2013, p. 52). They go on to argue that the reform plans are not realistic, and that they do not address the real issues of '*quality, efficiency, unity, equity and, most importantly, internationalisation'* (Hayden & Martin, 2013, p. 52).

Perhaps in recognition of this, the 30-Year plan was later updated by the 20-Year Long Term Plan, which would encompass 2011-2030. This also produced another row of National Development Plans, to further develop the goals in the 20-Year plan (Japan International Cooperation Agency, 2013). Subsequently, the Education Working Groups reviewed and restructured the relevant policies, which columnated into the drafting and passing of the National Education Law (Oxford Business Group, 2018b).

The Comprehensive Education Sector Review was the first of its kind for over two decades, and its subsequent reports were part of creating a much-needed overview of the sector (Tanaka et al., 2015). Much of the data used in literature for this thesis, is based on these reports. The Review process also ensured multilateral, international cooperation which further opened dialogue internationally about the reform process, and the best way forward (International Programmes, 2013).

5.4.2. Key aspects of reform

Consequentially, a number of key aspects of the education sector were found in need of reform. These included the teaching methods, TVET, as well as innovation and research (Oxford Business Group, 2018a). For primary and secondary education, it is found that a promotion of access, as well as finding ways to increase completion is important. The curriculum should also be modified so that skills, capacity and knowledge is to a greater extent acquired through the education process. Teaching methods should become more interactive and participatory. Equitable access to university and other higher education is also necessary to ensure development, as well as bettering the TVET sector (Oxford Business Group, 2018a).

Much attention is given to the need to reform the higher education sector (International Programmes, 2013). Daw Aung San Suu Kyi had a notable speech on education as a democratic promoter, where she specified that the universities will be key for the future. She identified four aspects which will empower the sector to thrive. The first aspect is autonomy for the

universities, to make them more efficient. Secondly, equal opportunities for every social group to have access to higher education. Thirdly, the universities should be open to change, so that they can more easily reform to improve innovation. Lastly, she wishes for universities to be reformed to better face the needs of the future, through better curriculum and moving away from the rote learning system (Salmi, 2013). These aspects can also be found in reports, conferences, as well as government documents (Galvàn, 2013). One can thus assume these four aspects are the foundation upon which the new higher education system will be built.

5.4.3. The System Reformed

The most immediate change in the education system, is the reform of the 5-4-2 education system, which has been changed to the KG-5-4-3 structure also called the K-12 system (Hayden & Martin, 2013). The reform meant including kindergarten as it is normally found internationally and adding a third year to high school. This process is forecasted to be finished implemented by the 2021-22 schoolyear (Tanaka et al., 2015).

An example of the notions Hayden & Martin (2013) criticised can be found in the MoE *National Education Strategic Plan 2016—2021*, which describes the measures needed to improve distance education. It is found that there is an urgent need for better quality of education in this type of higher education, as well as access. On a long term basis, the report contends that distance universities will be '*transformed into a national open university [...] This will enable any individual to register for degree courses, regardless of where they live*' (MoE, 2016, p. 195). It is recognised that this will require a substantive and wide range of competences and reforms in the distance education sector (MoE, 2016). The distance education reform process can thus be expected to be a long one and does not meet the real needs found in the sector today, as Hayden & Martin (2013) argues.

In order to address the issues in pedagogy and teacher qualifications, the Teacher Competency Standards Working Group was established in 2015 (Oxford Business Group, 2018b). The group was to create a teacher's qualification framework, which will make clear the needed qualifications and competencies for teachers. These are under four key areas: skills and practices, values and dispositions, growth and development, and knowledge and understanding (Oxford Business Group, 2018b). Several drafts including field tests have been done in cooperation with faculty staff in schools, which hopes to alleviate the issues regarding quality of teaching (Oxford Business Group, 2018b). This way, they hope to introduce critical-thinking and problem-solving skills to the students (Nesbitt, 2016). MoE has also hired over 72 000

teachers on a 'daily wage' which will function as monthly temps, receiving valuable experience. However, they are unqualified for the position, except for a one month training course (Oxford Business Group, 2018b).

To enforce the coming reforms, MoE has estimated that they would need to build 30 000 schools in the next 10 years (MIMU, 2015). Excluded from this, is the need for childhood care and development centres, as well as infrastructure for lifelong learning education. In 2014 they had built over 44 000 kindergartens, as well as approximately 2000 classrooms (MIMU, 2015). However, while these numbers are promising, the need for a stronger education budget is clear (Nesbitt, 2016). There is also a recognition of the fact that the reforms will take time, which as the OECD (2014) argues, Myanmar does not have.

In terms of curriculum reform, MoE (2015, p. 3) contends that they have revised curriculum to reduce '*content overload for teachers and students*'. This was done both in the textbooks and the syllabus. This structural reform was scheduled to be implemented in the 2015-16 schoolyear for year 1 students, while year 2 will be changed in 2018-19, the year 3s not until 2019-20, and while year 4 and 5 wait until 2020-21 and 2021-22 respectively. The reformed curriculum is created to '*match international standards*' (Phyu, 2017). There have also been consultations in order to promote TVET into the curriculum as part of the reform (MoE, 2015). There are however no signs of the reforms done previous to this study, having had any real effect (Nesbitt, 2016; Ulla, 2017).

According to MoE, the targets for life skills learning for young adults have been achieved, while TVET access needs to be promoted (MoE, 2015). There are several TVET field highlights in recent years; A Singapore-Myanmar vocational training institute has been established in Yangon, which give short-term courses in specific skills. Additionally, a private organisation has established the Centre for Vocational Training to also provide skills courses (MoE, 2016). In 2014 there was also established a TVET Task-Force, which was to promote coordination among the relevant ministries, as well as between the public and private sector (MoE, 2016).

A website has also been launched, www.tvetmyanmar.org, which provides information regarding TVET opportunities (MoE, 2016). However, if one attempts to visit the site, one is sent to a placeholder commercial ad webpage. One can also question the applicability of such a website, considering the findings of internet use in Myanmar in section 5.2.

6. Problem Analysis: Education and TVET on the Local Level

The previous chapter found several systemic and institutional challenges to the education and TVET sector. These are, however, from a variety of sources with data collected from different time periods. To gain an understanding of the current situation on the local level, the primary resources data obtained during fieldwork will be analysed below. By doing this, the following discussion in chapter 7 will be precedent bound, ensuring an informed decision-making. The categorisation framework is developed using the data itself, as well as what was learned in chapter 5.

6.1. Education in Myanmar

A returning aspect of the education system was the fact that there is a general lack of teachers. In primary schools such as the Meiktila Buddhist Nun Monastery Education Centre, there were a total of six teachers for 105 children. Two of these teachers were nuns, while the other four were from outside the monastery (Monastery Representative 2017, personal communication, 7nth October). The other monastery education centres were found to have similar teacher shortages (Munk Representative 2017, personal communication, 17th October).

One source was able to expand on the system for enrolment into postgraduate studies. All these courses are fulltime studies, and PhDs are interviewed for their positions. They also must take a test in English, the subject they wish to research, and have attained high marks from their previous studies. As there is a shortage of teachers available to supervise the students, only three PhD positions are available in the department he supervises (University Professor 2017, personal communication, 11th October). Teacher shortages are thus a systemic issue found not only in monastery education, but also at university level, as was argued in literature in chapter 5.

Day students are more likely to qualify for postgraduate positions than long-distance students. The long-distance students would have to attain exceptional results to qualify, which would be difficult for them as they work while studying. Day students on the other hand are supported by parents and are thus more likely to achieve good results (University Professor 2017, personal communication, 11th October).

Generally, the emphasis on attaining high marks in high school, and its subsequent effect on one's life, as well as one's household, are quite high. As mentioned in 5.3.1, society in Myanmar finds a student attaining a science-based degree as cleverer, or more qualified in general than any arts degree. This is still prevalent today, where the course one takes in university is pre-set

for you depending on one's marks. If one is able, one simply must take the highest achieving subject, which is studying to become a doctor. Therefore, one finds many in high positions which have Dr in their names, as they were able to get into medical school and felt they simply had to attend. They do not necessarily work in the field afterwards (S. Thet San 2017, personal communication, 2-17 October).

6.2. Reform of The Education Sector

The reform process of the education sector is supported by UNICEF and started in 2012. As primary teachers tend to be inexperienced with '*limited capacity*', they began the process at this level (Malar San 2017, personal communication, 3rd October). In her interview, UNICEF's education officer Malar San (2017) argued that the reform process will work hard to get the education sector '*in good shape*'. She argued that there are three main areas which need to be attended to. Firstly, there is a funding and capacity gap. Secondly, there was no systematic plan to opening the country internationally, so the government is struggling to build the education system with limited staff. Thirdly, it is difficult to recruit teachers, which has created a quantity over quality approach to faculty staff.

Local education management in Meiktila are less positively inclined in terms of the reform process. Myo Thawta Win (2017), who is the principle chief of academic affairs at a private school in Meiktila, argued that despite the government changing the curriculum or exams, the teachers will not change. He also blames the shortage of teachers for the situation, as there should only be 25-30 students in a classroom, but most have 70. The teachers cannot cope with the sheer number of students. He therefore hopes that the government continues to open for private schools, in order to take some of the burden from the public-school system (Myo Thawta Win 2017, personal communication, 10th October).

6.3. NGOs in the Education Sector

Three NGO's of different types were interviewed during fieldwork, firstly Save The Children Education Consortium, secondly, UNICEF, thirdly, Helping Hand.

The Education Consortium was represented by Kyi Lwin Oo, who told the research team about the projects they were involved with in Myanmar. They mostly concern themselves with non-formal education, complimenting the formal education system and particularly support ethnic children. They try to take care of their education, as well as give aid to monastic schools (Kyi Lwin Oo 2017, personal communication, 3rd October). The Meiktila Buddhist Nun Monastery

Education Centre in Meiktila had received support from them to build a classroom as well as furnishings for it (Monastery Representative 2017, personal communication, 7nth October).

The consortium '*take into account many factors, the ethnic education system is most in need'*, which is why they most only support the education providers outside of MoE government control (Kyi Lwin Oo 2017, personal communication, 3rd October). They have a good relationship with MoE, as well as the ethnic education groups because of this, and provide training for the monastic educators. Since MoE cannot fully support the monastic educators, they need training which the NGO provides (Kyi Lwin Oo 2017, personal communication, 3rd October).

Thus, the consortium focuses more on infrastructure and resources in their project, like chemistry buildings, but do not have any say in curriculum that is being used at the schools. They care for mechanisms, like helping monastic educators apply for funding, and facilitators between groups and the government. Since the 2015 election the government has been very open and positive towards projects like the Education Consortium, as they see it as part of the developing peace process (Kyi Lwin Oo 2017, personal communication, 3rd October).

UNICEF also runs several projects in Myanmar and hope to promote quality education. From 2011 to 2016 they had a program for early childhood and primary education, focusing on quality and equity. They also provided non-formal education and life skills to adolescents, as well as humanitarian aid. This was done through education centres. In June 2016 the mentioned program ended as the donors did not wish to continue (Malar San 2017, personal communication, 3rd October).

UNICEF functions as a bridge between the government and nonstate actors, helping them talk, negotiate and collaborate. Therefore, UNICEF focus on supporting ethnic groups who have barriers to attaining government services, but they do not support ethnic groups politically. They also provide school materials like books and teaching materials. The groups' request what they need, and UNICEF provides resources. This way they prevent giving material not needed by the local actors. If non-state actors request materials UNICEF gives the materials to the local government which then divides the resources. This creates mutual respect between the actors and creates legitimacy for the government (Malar San 2017, personal communication, 3rd October).

The Helping hand organisation is quite different from the others, as it is a local project started by members who wish to help the local community in Meiktila. They collect and handle the

donations collected from the community and members and gives it to education and health centres for children in need. Each member must give 500 Kyat per month to the donation pool. They give mostly to the Meiktila Buddhist Nun Monastery Education Centre and one other school. Over 120 people contribute every month. This means that they give over 500 US$ every month. The money is spent on furniture and food. They also give money to compensate staff such as librarians (Helping Hand 2017, personal communication, 7nth October).

6.4. Learning Environment

One can also find that quality, or applicability of education is a significant issue. At UPT Electric & Electronic Cooperative Company, 1/5 of the employees in the industrial zone were university graduates. The factory accountant was a woman with a history degree, but who had taken accountancy, computer and maths courses post-degree. She worked there to gain experience, which she could then use to get employed somewhere with a higher salary in the city. The manager, Daw Kyu Kyu argued that in general liberal arts graduates have a low chance of getting employment, which is why the accountant took the extra classes. Yet, one is also seen as more qualified simply because one has been to university (Daw Kyu Kyu Thinn 2017, personal communication, 3rd October).

In USFGa, a chemistry student was very clear on the fact that graduates from high school lacked foundational knowledge on the topic for further study at university level. It made it difficult to understand the teachers at university, as in high school one can pass chemistry even by simply skipping the lectures. In university this was not the case. They therefore argued that while there is a lack of quality education systems in place, the students themselves must also work hard (USFGa 2017, personal communication, 13th October).

The teacher-student ratio was problematic in private tuition. During the requirement process for participants, we visited a long-distance student hostel, accommodation which specialises in long distance students. When we arrive, the accommodation is running a private tuition class. Over 60 people attend. They sit at wooden benches in rows, listening to the teacher read off the blackboard before repeating the information back. The building has three walls, a roof, and is several meters long. Pertaining to the structure of the building, it is highly unlikely that the students at the back were able to see the board, or even hear the teacher.

This is one of the reasons private tuition has become so popular, USFGb (2017) argue, as there are over 100 students per class at Dawei University, while private tuition only has 50. It is

therefore easier to get feedback and personal time with the teacher (USFGb 2017, personal communication, 14th October).

This further makes it difficult for teachers to use participating and engaging teacher methodologies. Myo Thawta Win (2017) explained that in labs such as chemistry and biology the kids watch the teacher perform step by step without the teacher explaining what is actually happening. This is indicative of the rote system where the students learn the steps, but do not understand what they are learning *means* (Myo Thawta Win 2017, personal communication, 10th October).

U Nandar Cariya, a representative from Sett Oo Monastic Education Middle School, argued that they are able to teach using different teaching methodologies, as they are not part of the public school MoE system. They focus more on the children attaining Myanmar language abilities, so that they can use it more effectively, as well as Buddha's teachings. Consequentially, by the 10th grade they can write essays and letters independently. They also use books outside the government approved texts in order to supplement learning. They focus on letting the children figure out the answers themselves, rather than give the answers to them, particularly in maths. However, some do need to learn by heart to pass. He estimated that about 50% can pass the high school exams each year (U Nandar Cariya 2017, personal communication, 10th October). Thus, there are education centres which do attempt different learning methodologies from the rote system.

Another such institution is the Parami Institute, which gives university level courses to students in arts degrees, focusing on quality of education. They wish to introduce critical-thinking and logic skills to the students. Khaing Zin Win (2017) was a student at the Institute, who said that they have more interactions between the students and the teachers through discussion than in the public universities, which is a popular change. There are discussions, arguments and one is required to learn by themselves, and one is less dependent on the teachers. In public schools it all depends on teachers, as the system is centred around them (Khaing Zin Win 2017, personal communication, 4th October).

6.5.   Curriculum

While the curriculum is created centrally by MoE, it is the individual universities that sit down and look through the syllabus to decide what and how it should be taught. Each department also chooses the exam questions, but, according to the university professor (2017) the teachers are

not allowed to mark their own specialisation (University Professor 2017, personal communication, 11th October).

LD student A was taking a two-year course to get a history degree. She took private tuition from two months before exams began, and otherwise worked as a midwife for the past 3 years. She did not have any medical or university training in being a midwife, and except for a high school diploma, she was uneducated. Her English subjects that semester included philosophy, prose in English, English grammar, and morphology in English. All her lectures were held in Myanmar language, and she hoped to continue to be a midwife in the future. She was getting a university degree 'because it is the proper thing to do', and because she needed a degree to get a higher rank as a midwife. She said that any degree would help in doing that (LD University Student A 2017, personal communication, 8th October).

LD student B on the other hand studied geography, a subject which was picked simply because it suited her schedule. Previously she was a middle school teacher but was now retired. Her view was that long-distance education is the same all over the country, and of a poor standard. Her main reason for getting the degree was in order to be promoted, and that she wished to start a weaving business making male longyi. In case she wanted to go into public service, she still wanted a degree despite it not being applicable to her current future plans. She also wanted her kids to know their parents had university degrees, for the status this brings in society. She did not want to be less-than the other adults in her child's life (LD University Student B 2017, personal communication, 8th October).

In terms of what they learn exactly, she finds it difficult to explain. Mostly, their education is focused on the topics which will come on the exam, but not the questions themselves (LD University Student B 2017, personal communication, 8th October). She says that day students will have practical aspects to their degree, while long distance students do not have time for that. During fieldwork for geography the day students go into fields and research plants, as well as take measurements and do calculations. Long distance students therefore mainly study theoretical subjects. This includes soil geography, geography of settlement, water sediments, economic geography, and English (LD University Student B 2017, personal communication, 8th October).

LD student B (2017) described that long-distance students must complete two assignments as well as exams. However, some bookshops sell answers to the assignments, it's on display in their stores. She did not know who writes them, and plagiarism is not allowed at the university.

For many who do not have someone to guide them in answering the assignments, they copy from other students or buy the answers. People who work do not have time to read the textbook, and most enrol late, which means they have less time to complete the assignments (LD University Student B 2017, personal communication, 9th October). The assignments are thus ineffective in providing academic value to the students.

One must thus consider the responsibility of the student in the education system. As mentioned above, students might skip classes and still pass in high school, and then learn that they will not be able to achieve the best results at university. Doing the bare minimum is thus the solution to passing. The Dawei students therefore argued that the curriculum is already good, but it is up to each individual student to live up to it. The only issue they could find was that there are not enough teachers (USFGa 2017, personal communication, 13th October).

To ensure student motivation, the Parami Institute have several tests in English, maths and a Myanmar language essay, as well as two rounds of interviews with their potential students. By doing this, they can be sure that the students are not just eager to join their courses, but also able to do the work (Dr Kyaw Moe Tun 2017, personal communication, 4th October).

6.6. English

English language was also a reoccurring theme among the students. USFGb (2017) argued that they were not proficient in English, which made it difficult understanding the teacher. They therefore rely on the notes the teacher translates for them. They also say that English is taught as a subject since primary year 1, which is taught then in the same way as it is in university (USFGb 2017, personal communication, 14th October). This was also noted by LD student B (2017) who showed the research team one of her handbooks. The entire book was translated into Myanmar language in the margins or in between the English sentences (LD University Student B 2017, personal communication, 9th October).

She continued by saying that if the handbook were for the English language subject, she might try to understand it, however, in the other subjects she will use a dictionary. By this, she explains that she will look in a dictionary and see if key words in the textbooks match the question, and if it does, she will copy the answer from the book and adjust to the question. She has no background in mathematics, and do not understand the calculations aspect of her degree, so she will in those subjects simply copy from the answer sheet sold at the bookstore. She feels like long distance students are neglected, as they get little to no support from the university staff

and wished they would give some classes for the assignments, rather than just private tuition (LD University Student B 2017, personal communication, 9th October).

One could also see the language issues in class of the Hospitality and Catering Training Academy. The Academy is well known and gets around 200-300 applicants a year to their 110 positions for students wishing to learn to be caterers, hotel managers or housekeepers. They have many practical education rooms for this purpose, including a hotel standard kitchen and standard hotel rooms. The students are taught by doing the work and take 8-month internships at hotels. The students who pass are hired by five-star hotels in Yangon, Mandalay and Bagan (Dr. Mar Too Nyi Bu 2017, personal communication, 16th October). However, language was still an issue for both students and the teachers. While the research team was shown around the academy, a computer room was visited. A class were learning English using a program on the computer. Yet, when asked they were unable to name the program, and despite rephrasing the question, none in the class nor the teacher understood the question itself.

There was thus found a language barrier not only for the students, but also the teachers. When they instruct the students, they will therefore use their mother tongue '*even if the teachers tried to speak in English, the students would not understand*' (Education Manager Source 2017, personal communication, 14th October). In the interview with EMS, he was asked why the books are in English if neither the teachers or the students were proficient in it, he then laughs and says it is because '*we are not the policy makers'* (Education Manager Source 2017, personal communication, 14th October). Yet, the students do not wish for university to be taught in Myanmar language, as English is important to their future job prospects (USFGb 2017, personal communication, 14th October).

6.7. Exams

The language issue also continues to make the students reliant on the teachers. As they do not understand the English, they rely on the translations given by the teachers. Consequentially, as the teachers also do not understand the English, they would mark correct answers worded differently than what they have taught the students as wrong, despite the content being correct (LD University Student B 2017, personal communication, 8th October).

The exam is different for long distance and day students, as well as the workbooks upon which they are based (LD University Student B 2017, personal communication, 8th October). The assignments for long distance students are due around the 31st of June, and the 31st of August. To check that the student submitted these assignments, they compare the handwriting of the

assignments and the exam. LD student B said there are rumours of people where the handwriting did not match, which meant that they were given no marks, or their marks were heavily reduced. The exams have 6 questions, with an A and B section with 3 questions each. They must choose 5 of these to answer. If you choose not to answer any section you will fail, despite answering the other. It is assumed after private tuition you can sit for at least one or the full 3 questions of each section. If they do not really know any of the answers they write something down to get the minimum mark (LD University Student B 2017, personal communication, 9th October).

She told us a story from law studies, where they all had done past exams to practice before the exam. They knew that the minimum mark to pass is 60, so they sat in the exam for 60 minutes answering the minimum amount of questions needed to pass. However, the teachers had raised the amount of marks one needed to pass that year, and most were then not able to pass the exam (LD University Student B 2017, personal communication, 9th October).

Assignments have their student number on them, while exams have seat number as well as their student number. When the exam is marked the seat number is covered. The exams last for 3 hours. Cheating is common, but teachers guard to confiscate cheating materials. They are closed book exams, with no aids. One does not receive the marks one got, only if one passed or failed. Long distance students have moderated marks, where teachers take allowance for the fact that they are long distance students. If one wish to continue studying, one can apply to receive the marks, but no one does this (LD University Student B 2017, personal communication, 9th October).

LD student B concluded our interview by arguing that there are universities in Yangon which do not function this way, based on private tuition and rote learning. Where the teachers are more forward thinking and the lectures are more discussion based. She wishes this would become the case also in Meiktila. She wants to be able to learn by herself and go to school to discuss what she has learned. She realised by reading news that teachers do not teach anything anymore. However, since the teachers in Meiktila mark the exams she has no choice but to learn by heart rather than discussing and understanding the subjects (LD University Student B 2017, personal communication, 9th October).

6.8.   Teachers

The Myeik student union described that the teachers select the students to be part of the union. They choose the '*most communicative students*' for these positions, those who are tactful and

committed. The union then arranges school functions, such as a yearly event where the students show respect to their teachers. They all gather and apologise for all the wrong things they have said and done to the teachers. This year they will ask for 7000 Kyats from each student, which will pay for the food needed for the teachers and students, as well as gifts for the teachers. They collect the money going through a list of names from the university, but they argue that the teachers would not know if a student did not pay (USFGb 2017, personal communication, 14th October).

There is also a prevalent culture against criticising the teachers, as the instance with LD student A showed, as well as LD student B who became much more critical when the hostel manager did not listen to our interview. The students are quicker to blame themselves for not working hard enough and blame issues on the teachers' lack of resources, than blaming the teachers themselves.

Myo Thawta Win (2017) also pointed out another interesting aspect of the teachers and the rote methodology. He argued that since parents now come to expect this form of learning, they might complain to the teacher if they try to do something different. As the teachers are dependent on the parents for financial support, they must try to be as pliable as possible, reducing the learning of the students in the process. Additionally, as parents expect their children to pass, the teachers must continue using a system they are familiar with, as if they did something different and their child were unable to pass, the blame would go to the teacher (Myo Thawta Win 2017, personal communication, 10th October).

6.9.   Resources

A key issue admitted by most of the students was the lack of education resources. There are not enough learning aids and kits for everyone (USFGa 2017, personal communication, 13th October). Once a student enrols in March, they must be sure to pick up their textbook and worksheet as soon as possible. If one is too late, the university will have run out of material to give students, and they are told to come back in May or start of June. This vastly affects how much time a student has to do the assignments, as if one gets the worksheet in March one can work on it for three months, while in June one only has a month to start and complete it (LD University Student B 2017, personal communication, 9th October).

6.10.   Private Tuition

Private tuition is incredibly important to the performance of the students, as USFGa (2017) said, they could not remember anyone achieving the honour roll at university without attending

it (USFGa 2017, personal communication, 13th October). However, they themselves argued not to take it, meaning that it is not universal for day students. Also, in USFGb (2017) this was the case, where they spent four hours a day at university in lectures, and then only went to private tuition in the subjects they felt they needed help with, a month before exams (USFGb 2017, personal communication, 14th October). For private tuition, each subject cost 10 000 Kyats (USFGb 2017, personal communication, 14th October).

Even still it is common for long distance students to rely on their private tutor for everything. The individual teacher makes a handbook for their private tuition class, and it is different for each subject each year. Every tutor has a different cover for their handbooks, but they have mostly the same content (LD University Student B 2017, personal communication, 9th October).

Exams begin in October, and private tuition for long distance students begin two months before that. They also get a ten-day intensive course by the university before exams. These begin on the 14th of October and end on the 24th, while exams begin on the 27th. Those unable to pay for private tuition rely entirely on the ten-day course. In the ten days 'camp' the content tends to be the same as private tuition, if it is very dissimilar there is a high chance the students will not pass. This is the entire years' worth of teaching for the long-distance students (LD University Student B 2017, personal communication, 9th October).

It is generally recognised that the teacher will explain things differently in private tuition than in regular class, as well as print out material aids. The tuition is based on the same system however, of the teacher reading out loud and the students repeating it over and over (USFGb 2017, personal communication, 14th October). However, EMS argued that only teachers which are unqualified for the profession runs private tuition practices. They want to capitalise on the students, and he says that private tuition 'happens all the time' by those without certificates in teaching (Education Manager Source 2017, personal communication, 14th October). However, USFGb all said that their private tutors had certification from an established teacher college (USFGb 2017, personal communication, 14th October).

Even for its prevalence in society, private tuition is thus not looked favourably upon by educators. Also, the private school whom Myo Thawta Win represented discourages the practice. However, they find it difficult to end completely, as parents believe the students need private tuition to learn. It has become such an establish part of society that parents do not believe their child will adequately learn without it. The belief is that the teachers, as humans, will favour

answers closest to those they taught, in the exam. So, the school has made rules where teachers cannot tutor their own classes (Myo Thawta Win 2017, personal communication, 10th October).

A common aspect of the private tuition and long-distance system is the use of student hostels. These are accommodation which has agreements with tutors, who come and tutor the students living there for a fee. One is required to take the courses at the accommodation. Classes run almost all day, and curfew is at 6:30 PM when the doors close, those not inside then are unable to get in, the rest of the time they spend indoors studying. The costs of the hostel is 10 000 Kyats per subject for the private tuition, and another 10 000 Kyats for the hostels running of the private tuition. Additionally, 20 000 Kyats per month for a bed at the hostel where they share a room with another person. The rice cooker costs an additional 3000 Kyats to use. She explained that they cannot cook at the accommodation, other than a rice cooker. One must thus pay for food at restaurants.

Thus, staying at a hostel, partaking in near mandatory private tuition and being able to cook rice is for the LD student B hostel 113 000 Kyats. As private tuition is necessary to pass a year of university, they then must pay above the fee which is higher than the monthly average wage, without considering additional food costs (LD University Student B 2017, personal communication, 9th October). The hostel for the long-distance students in USFGb were similar, with all subjects coming to a total of 65 000 Kyats, and 25 000 Kyats per month for staying at the hostel. They had no way of cooking food there (USFGb 2017, personal communication, 14th October).

6.11. Teacher Training

Another aspect which was frequently mentioned by educators, management and NGO's, were the lack of teachers who are qualified for their profession. Particularly this is the case for monastic education teachers (Kyi Lwin Oo 2017, personal communication, 3rd October). As the Ministry of Religious Affairs sponsor these schools, they are not given as high an amount to the salary of teachers as the schools under MoE. Some monasteries therefore collect donations to pay the teachers (U Nandar Cariya 2017, personal communication, 10th October).

The teachers at the Sett Oo Monastic Education Middle School which are not monks, are certified through training from NGOs. They have a popular program which they send teachers to, but some teachers will use this opportunity to gain qualifications and then leave to better paid work (U Nandar Cariya 2017, personal communication, 10th October). This was also the case for Myin Thar Myo Oo Child Development & Monastic Education School. Sometimes,

teachers from this monastic school would be scouted and hired for MoE schools, as NGO courses are high in demand (Munk Representative 2017, personal communication, 17th October).

If one wish to become a teacher through the formal education system, one can take an undergraduate degree and then further take a short course of 2-3 months (Myo Thawta Win 2017, personal communication, 10th October). Or, one can go to a teacher college. The curriculum for teacher education include learning the core subjects that they will teach, for example science, economics, agriculture or domestic science. After finishing their degree, the teachers are sent to rural areas, unless they are exceptionally qualified and are sent to cities like Yangon. They are employed according to academic performance, and the duration of courses tends to be 2 years at the institution EMS works, with 4 semesters and 4 exams. The reform developed by the government will increase this to 4 years, but the 35 colleges where they educate teachers, will not be upgraded all at once (Education Manager Source 2017, personal communication, 14th October).

The teachers are trained in the syllabus, story teaching, demonstration methods, and problem-solving methods (Education Manager Source 2017, personal communication, 14th October). He argued that many of those who attend teacher colleges are not there to learn how to be a good teacher, but rather as part of their job hunting. They think that "something is better than nothing" and join the teacher education course, it does not matter if it is something to do. These will only study to pass the exam, which gets them a certificate but does not make them qualified to teach (Education Manager Source 2017, personal communication, 14th October). The rote learning system is also used in teacher training (Myo Thawta Win 2017, personal communication, 10th October).

Malar San (2017) also argued that there are huge gaps between ethnic regions, in teacher quality. The trained teachers don't want to go to remote areas as there's no housing for them there, and it is difficult to travel. Even with government support most trained teachers attempt to come back to the regions. This government support includes double salaries, arranging housing for them and other such special allowances, as well as transportation. This is perhaps not so strange when teachers in villages sometimes have to walk 2-3 days, or 5 if it is in the rainy season, to get to a bigger town. Often, one cannot even see the road (Malar San 2017, personal communication, 3rd October).

One of the participants in the village focus group was a volunteer at the local village school, where she teaches children. She also went to university as a long-distance student. Her university fees were at 50 000 Kyats, and she took 6 subjects per semester. She wants to be a teacher of history, or generally any subjects would be good. Currently she teaches other villages, primary to middle school aged children in English, Myanmar, Maths and history (Village focus group 2017, personal communication, 8th October).

The teachers of the private school where Myo Thawta Win works, have taught many high achieving students, such as Ms Soe Thet San and the children of successful business actors in the town. They also hire teachers internationally. These did not have any teaching qualifications, one was a realtor and the other was a dogwalker in the US. The international teachers attempt to introduce other learning methodologies into the classrooms, such as games and wordplay which were used in their primary education, but this is generally not taken well by the other faculty who see it as simply playing (Myo Thawta Win 2017, personal communication, 10th October). The academic officers wished for the children to be able to go abroad to study, and for that they need to be exposed to different types of teaching, as in the public system they do not really learn how to apply what they learn (Myo Thawta Win 2017, personal communication, 10th October).

6.12.   Skills-gap

Myo Thawta Win (2017) went to Singapore before his current job and experienced a huge skill-gap between what he had learned, and what he needed in Singapore. He needed computer and English skills to function there (Myo Thawta Win 2017, personal communication, 10th October). He therefore established a computer lab for the private school students. He also encourages the kids to be critical thinkers. Primary schools would normally teach how to memorise, while they try to add critical thinking as well. Myo Thawta tries to get the teachers to ask questions like "what is your view of?", and therefore encourage free thinking (Myo Thawta Win 2017, personal communication, 10th October).

This is a key aspect of why there is such a high dropout rate at primary schools. As Teacher Source (2017) argued, the primary education sector as inadequate, in that the children are not given a proper foundation for further understanding. Many who leave the education system does so because they do not understand what they have been learning. Since the education system does not provide an outlook for them in the labour market, many quit (Teacher Source 2017, personal communication, 11th October).

The curriculum is seen as inapplicable to real life, and most of the students in the focus groups, and the students in Meiktila, saw no future in the field they were studying (USFGa 2017, personal communication, 13th October). The long-distance students in USFGb simply wanted a degree, as it is necessary to get any job at all. They did not choose the degree they are taking but were assigned to them according to their marks (USFGb 2017, personal communication, 14th October). The day students on the other hand, in USFGb, found that their degrees were highly applicable to work in the government sector (USFGb 2017, personal communication, 14th October).

6.13.   On-the-job Training

The industrial zone factory of UPT Electric & Electronic Cooperative Company Ltd. had 7 permanent workers. At any time, they might have 2-3 trainees, but this number is seasonal, in summer there are usually more. The trainees are seen as dispensable, as they only have basic skills. After a year they will have received enough training to move on to more difficult tasks. The trainees are given basic work like bending metal cords into a coil. They learn by watching the more senior staff until they themselves attempt the work, like welding. There are 3 permanent workers who are incentivised to train as they then produce more, which gives them a higher salary. The more they work the more they are paid, staying with a company is therefore profitable in the long term, and better skills gives you better and more complicated jobs, which are again better paid (Daw Kyu Kyu Thinn 2017, personal communication, 3rd October).

Permanent workers are relatively rare, and job hopping frequent depending on salary and type of work. Workers often return after a few days or weeks, stay and work for a time, and then leaves for more profitable work before returning. It is therefore hard to give advanced training (Daw Kyu Kyu Thinn 2017, personal communication, 3rd October).

For U Zaw Myint, the Thet San family business head worker, work starts at 7AM. He lives on site, as is common, and so his working hours are flexible. He came to the Thet San family to work when he was young and learned everything while working for them. He wishes to show gratitude for that by continuing to work for them despite the business no longer being as profitable. There is a promise that Ms Thet San's father will take care of U Zaw Myint's child in the future (U Zaw Myint 2017, personal communication, 7nth October).

He was trained on the job. The factory was previously owned by Ms Thet Sans grandmother, who had a devoted head worker who taught U Zaw Myint. However, this previous headworker

was not good with machines when they modernised the production process and got outside help to train U Zaw Myint. (U Zaw Myint 2017, personal communication, 7nth October)

Teachers in the Hospitality and Catering Training Academy also used a form of this kind of teaching. There was a professional standard kitchen where they at the time of our visit were making pastries. The teacher was making a large portion while the students stood around and watched him. They do this several times until the students feel comfortable doing it on their own (Dr. Mar Too Nyi Bu 2017, personal communication, 16th October).

Training and safety is generally not a priority, even if the workers were given safety gear like masks for welding and for the fumes from the circuits, they would not use them. All companies must pay a percentage of the employee's wages to a social fund which would then pay for medical care, if an accident where to happen. They would also feel responsible to give a sum to family if a worker is permanently hurt or pass away. The workers seem indifferent to the potential health risks of working without masks and other safety equipment (Daw Kyu Kyu Thinn 2017, personal communication, 3rd October).

6.14.   Child Labour

Ko Tun Zaw is the manager and owner of a teahouse and café called Mr Linn. Here, many of the workers are underage. The parents come and give consent for their children to work there. They need the money for investments and for survival. He therefore gives the family 2-3 months of the children's salary in advance, but no more as there have been cases where the children simply leave rather than work. He thus hires through connections, when someone comes and tells him the person can be trusted, usually from the same village or familiar relationships (Ko Tun Zaw Moe 2017, personal communication, 9th October).

His employees are thus in everywhere from primary to university age, two of his employees are long distance students, while three are day students. Since they have worked for him since high school he makes allowances so that they can do this. The day students quit their jobs in 4 months in order to study, while long distance students do so for 2 months (Ko Tun Zaw Moe 2017, personal communication, 9th October).

Child labour is also frequent in the industrial zones, such as where UPT Electric & Electronic Cooperative Company Ltd. are established. Since they must report worker age to the government, Electric & Electric hires above 17 years old. They do concede that some factories simply do not report the age of their labourers. Mostly they find that 8-13-year olds in the Burmese regions work as help with elderly care at home, prepare food, and school. In other,

ethnic minority states, it is hard to get education, parents send kids for work and education to the central areas. This is because the children can then therefore get a salary to help the parents rather than go to school (Daw Kyu Kyu Thinn 2017, personal communication, 3rd October).

The same was found at the Meiktila Christian Orphanage, where sometimes people from the children's past, family either immediate or extended would come for the orphans. By then they will be able to work and make money, rather than simply being costly to keep and feed. If they were not allowed to go, the children would simply run away. The number of kids who therefore graduate and live at the orphanage is low, and the number of kids who are successful later is also low. Except in Kachin state, which has inclusive communities who helps them out (Myo Swe 2017, personal communication, 7nth October).

At Parami Institute, they solved this by establishing scholarships and stipends for the students. This way, the students at the institute made money for their households and for their family but did not have to give up on their education as so many have to. This way they ensure that not only the richest students are able to learn (Dr Kyaw Moe Tun 2017, personal communication, 4th October).

7. Alternative Evaluation: Discussion

The following chapter will discuss the findings within the framework of precedent, the cycle of poverty and the SDGs. It will focus on how the LAMTIB Initiative can use the context of Myanmar to its advantage, to establish a successful education and TVET module. In the theoretical framework, this chapter is thus the alternative evaluation, where the information is discussed and evaluated to create an informed decision.

The cycle of poverty will be employed in order to show how the Initiative might affect the lives of poor and low-income people. This is essential, as it is a key aspect of the Initiative itself, as well as to gain an understanding of the applicability of the initiative to the country context. The targets of SDG 4 will be used to evaluate the Initiatives sustainability and development approach. This way, one can clearly see how the Initiative might influence the education and TVET sector, and make recommendations for further improvements to adhere to the development targets of SDG 4.

7.1.   Precedent

As described in the theoretical framework, the concept of precedent will be applied to the secondary and primary sources. It will firstly go through the precedent of the case, of how the Initiative can build a contextual, sociocultural, and real needs precedent-based education and TVET module. It will make arguments on how the findings in the above chapter can be used to this purpose. Secondly, how the time and space of the case will adjust the Initiative, as well as how LAMTIB can learn from past experience will be analysed.

7.1.1. Education and TVET Initiatives in Myanmar

On the macro level one finds that NGOs and literature argue for the need for better quality education everywhere. However, most projects are done specifically to improve education in ethnic states. Where they are not in ethnic states, it is mostly to ensure infrastructure and furnishing (Kyi Lwin Oo 2017, personal communication, 3rd October; Malar San 2017, personal communication, 3rd October; Monastery Representative 2017, personal communication, 7nth October). This could be a part of the NGOs adhering to the Accra and Paris declarations, to ensure strategic cooperation with the partner countries. However, it could also show that there is a perception of a lack of need in the other regions, as the majority Burmese regions tend to be thought of as more developed.

Compared to other NGO projects, LAMTIB is then a less traditional project for a foreign development initiative. As the aim is to create a learning centre, it might stand at risk of looking

too much like an outside influence, rather than a helpful cooperative initiative. Most initiatives and projects in Meiktila, as well as country-wide deal in seasonal courses as well as simply giving financial aid to the systems already set in place which request it. Effort must thus be put in from LAMTIB to promote collaboration, such as UNICEF has done.

Further evidence of this government-NGO relationship is the fact that UNICEF '*if non-state actors request materials UNICEF gives the materials to the local government which then divides the resources. This creates mutual respect between the actors and creates legitimacy for the government*' (Malar San 2017, personal communication, 3rd October). NGOs are thus helping the democratisation movement by giving legitimacy to the government on both the national and local level through using them as their middleman in local initiatives. LAMTIB should consider doing the same, to inspire cooperation with local officials. While the education program might be removed from the official system, even those providing informal education such as training courses, make sure to include them (Malar San 2017, personal communication, 3rd October). As described in section 5.2, Kinseth (2018) shows that a good relationship with local governments is important for an initiative to be allowed by them, particularly international ones.

7.1.2. Teachers

In terms of teacher training, it is found by most to be inadequate and underfunded. Even if the teachers do come from teacher training colleges, EMS argued that '*many of those who attend teacher colleges are not there to learn how to be a good teacher, but rather as part of their job hunting. They think that "something is better than nothing" and join the teacher education course*' (Education Manager Source 2017, personal communication, 14th October). There is thus a severe lack of motivation among the next generation of educators, and the current ones as found in chapter 5.

EMS further noted that '*These will only study to pass the exam, which gets them a certificate but does not make them qualified to teach*' (Education Manager Source 2017, personal communication, 14th October). One aspect of education which is necessary and should be addressed then by an education initiative, is giving a space also for teachers to train and develop their skills. Additionally, when teachers are offered courses from NGOs, they will use them to their advantage in getting a higher paid job, rather than staying at the school where they are so needed.

As MoE pointed out, even the best teacher training cannot change demotivated workers, as they see themselves as having low pay and little prospects for advancement (Hayden & Martin, 2013). Therefore, an initiative must resolve to train teachers which are motivated for their future jobs, rather than simply for financial gain. As the New Highway Project found, simply giving the teachers resources, or even working with them in small groups over a short time frame is ineffective, as they will simply revert to their old habits. A systemic approach over time should thus be employed, being sure to engage committed teachers.

One interesting aspect of the information gained from the primary sources, is that no one mentioned the corruption which was thoroughly discussed in other literature. While yes, one could buy pre-written assignments, and yes, one should go to private tuition of your teacher, they did not mention whether one can pay to get better marks. Either, this means that corruption of this kind is not prevalent in Meiktila, or it they did not feel comfortable discussing this. The prevalence of private tuition does however present some challenges for an education and TVET learning centre.

Teachers have a high status in society, despite their fears of complaints from parents, and are the ones who both set the exam questions and develop the curriculum, as well as the private tuition, it thus seems essential to engage them in some manner. As teachers do not change their teaching styles in fear of the potential complaints from parents if their child should fail, it is reasonable to think this same criticism can be made for LAMTIB should a different style of learning be employed, which might tarnish the Initiatives' reputation locally (Myo Thawta Win 2017, personal communication, 10th October).

LAMTIB must thus find a path between either rejecting the rote learning system and potentially being found alienating to locals in the education sector or find a way to include both local officials and the education sector in its education and TVET operations.

7.1.3. Students

As the rote learning system has become so institutionalised, it is not surprising that students tend to take education lightly, skipping classes and only attending the minimum, if even that. As one could pass for the high school exam simply by memorising, learning skills at university is expected to be similar. This could explain some of the skill-gap between graduates and the labour market, even if the curriculum was relevant to the market, the students would only attend the minimum which was needed to pass. Therefore, interviews and assessment as done at Parami could be incredibly helpful to find the motivated students which really wish to learn and

attain experience. The popularity of other education programs, certificate giving initiatives and courses, means that it is not far-fetched to assume that LAMTIB's learning centre will be popular. It is however a need for an initiative which takes the qualification it gives out seriously.

It is also concerning that most students who take long distance education and liberal arts degrees are simply expected not to use it in their future, continue on to postgraduate studies, and must take extra courses at the end of their studies (University Professor 2017, personal communication, 11th October; USFGa 2017, personal communication, 13th October; USFGb 2017, personal communication, 14th October). This enables only those in a financially able position to succeed in education and TVET. The poorest students take long distance education simply to be able to find work and put little stock in their own degree (LD University Student A 2017, personal communication, 8th October; LD University Student B 2017, personal communication, 8th October).

7.1.4. Resources

As the universities have shown to lack resources in terms of the textbooks and worksheets the students need, LAMTIB might consider addressing this issue. This can be done either through providing copying and printing services in some way, or through creating a sharing environment in its learning centre. Alternatively, LAMTIB can push for a further implementation of projects like 'LearnBig' which was developed by UNESCO Bangkok to serve the education material needs of Myanmar children living on the Thai border. They provide PDF files of primary school textbooks for every subject. Their partners currently are Microsoft, True together, POSCO 1% Foundation, Thailand Office of The Basic Education Commission, and The Thailand Office of the Non-Formal and Informal Education (LearnBig, 2018). As all curriculum is provided centrally by MoE, it is not too implausible to expect a similar solution might be applied for university level.

7.1.5. Learning Methodology

To both work and take a degree, the long-distance students put minimal effort into academic achievements, studying only for the exam by paying for private tuition and buying answer sheets in bookstores. They therefore get little to nothing work relevant from their obtained degree. An approach which is more focused on understanding, and less teacher-centric rote learning is needed to promote change. This is also realised by the students themselves (LD University Student B 2017, personal communication, 9th October).

There is precedent in society for the implementation of different learning methodologies, such as in Sett Oo Monastic Education Middle School and the Parami Institute. LAMTIB should thus attempt to promote a style of learning which does not rely on the rote system. As many have noted in chapter 5, it is detrimental to the overall education system. If the students are taught to understand rather than simply know the steps, it could have potentially huge benefits to generation of human capital, as well as financial capital. The fact that NGO coursed teachers are in high demand in the public education sector also suggests that a teacher training course specialising in such methodologies will be successful.

7.1.6. Critical Thinking and Use of Sources

As has been mentioned both in section 5.2, and throughout the teaching management sources, as well as LD student B, there is a lack of critical thinking skills being taught in Myanmar. On one hand, this affects the learning of students, as they simply regurgitate what the teacher told them (Myo Thawta Win 2017, personal communication, 10th October). On the other hand, it also adversely affects how sources are approached. In a society where news are simply believed, an emphasis on critical thinking could have considerable effects on society. LAMTIB should stress these aspects of education on every level of their e-Learning hub, for every participant, and for every worker they employ for their small-scale business module.

7.1.7. Applicability

What the students are learning seems irrelevant for most long-distance students, and therefore, one can question why they take university courses at all. However, as it is a systematic factor in the Myanmar society, it would be detrimental to the Initiative to reject this aspect completely. Instead, the Initiative might gain from trying to improve the student experience of long-distance students. By hiring long-distance students in positions which would be applicable to their degree, such as geography and marine students working to research where HICs might be established in their local area, writing reports and using their skills, both the Initiative and the students might gain. As Ko Tun Zaw Moe (2017) did for his employees, the Initiative might be able to make allowances in exam season for these students.

Alternatively, the Initiative might employ a combination of work and studies for these students. This would enable them to work in the morning and day time, and the Initiative could provide e-Lectures and perhaps a form of private tuition in the evening. The students are then able to learn over time and properly digest the material, rather than simply learning by heart to get an

unrelated job. To ensure motivated students who will do the job, one sees a further use of the Parami Institute's version of enrolment.

7.1.8. Language

English courses focusing on understanding are essential. The level of understanding expressed by both educators in the primary school sector, teachers, managers, and university students, mean that these courses should run on the most basic level for every group with ability for advancement. As B. A. Moe (2017) showed, even the courses given specifically to learn English are not of a high enough standard, neither is the university students' understanding. As the language is crucial not just for the future work of the students, but also for the LAMTIB small-scale business to access higher level value chains, it is crucial to provide quality and equitable English teaching courses.

7.1.9. TVET

In every aspect of vocational and technical training, there was a focus on the students watching their senior colleague do the work (or teacher). They would do this over and over, quite like the rote system, until they themselves were able to perform the same task. E-Learning could thus be highly beneficial, as one could film a senior worker do it correctly and show the new employees as a training video. The video could be played as many times as they feel necessary, and the senior staff could function as consultants and give advice rather than spending their time training the juniors. The Initiatives coconut and HIC small-scale business development could greatly benefit from this, making the workers much more efficient. Especially if the e-learning program is set up in a way which is intuitive and understandable for low-skilled workers who might only have ever used Facebook and their smartphones as an ICT tool. This would also circumvent the issues other foreign companies have found in hiring skilled workers.

7.1.10.   Using the Precedent Model

To show how the following precedent building aspects of Myanmar can be operationalised to a precedent decision-making framework, see figure 10. As the framework shows, the education and TVET module will be able to address several key issues if it is applied.

On the operational side, the Initiative should consider the state of the time and space of the case. Here, this means; the democratisation process, and how it might affect political and NGO activities in different regions; education reform, what stage it is in currently and what the government sees as the key issues; the local political and economic situation in Meiktila;

globalisation and how it has affected the Myanmar population and economic market; and finally, how technology has been integrated into society.

An initiative hoping to launch an education and TVET module on the local level in Myanmar should also consider how past projects have fared in this environment. Here, the notable projects have been the New Highway Project, Kinseth (2018), UNICEF and Save the Children Education Consortium.

Additionally, it should adjust to the specific case at hand. This precedent model argues that these niches can be summarised as contextual, sociocultural and real needs. Contextual precedent in Myanmar is the financial need of the system, a lack of teacher training and perhaps most importantly the quality and equity of education. The second aspect of sociocultural precedent found that a traditional society, which highly values private tuition, is entrenched in a learning methodology which does not contribute positively to the contextual aspects. The lack of English skills, the skills-gap and on-the-job training are key aspects of sociocultural precedent which can be addressed.

Lastly, the real needs of the local population must be found in order to promote sustainable development. There is a need for initiatives to support the government in their reform as well as peacebuilding process. Local stakeholders should be engaged in order to promote a positive relationship with the community, this could be done through a form of private tuition classes. Teacher and language training are key needs which most every informant requested when asked how they would like education to be improved. To do this one must address the lack of learning resources, either in a hardcopy or softworks sense. The applicability of university degrees should be promoted, to engage the students and promote understanding rather than rote learning.
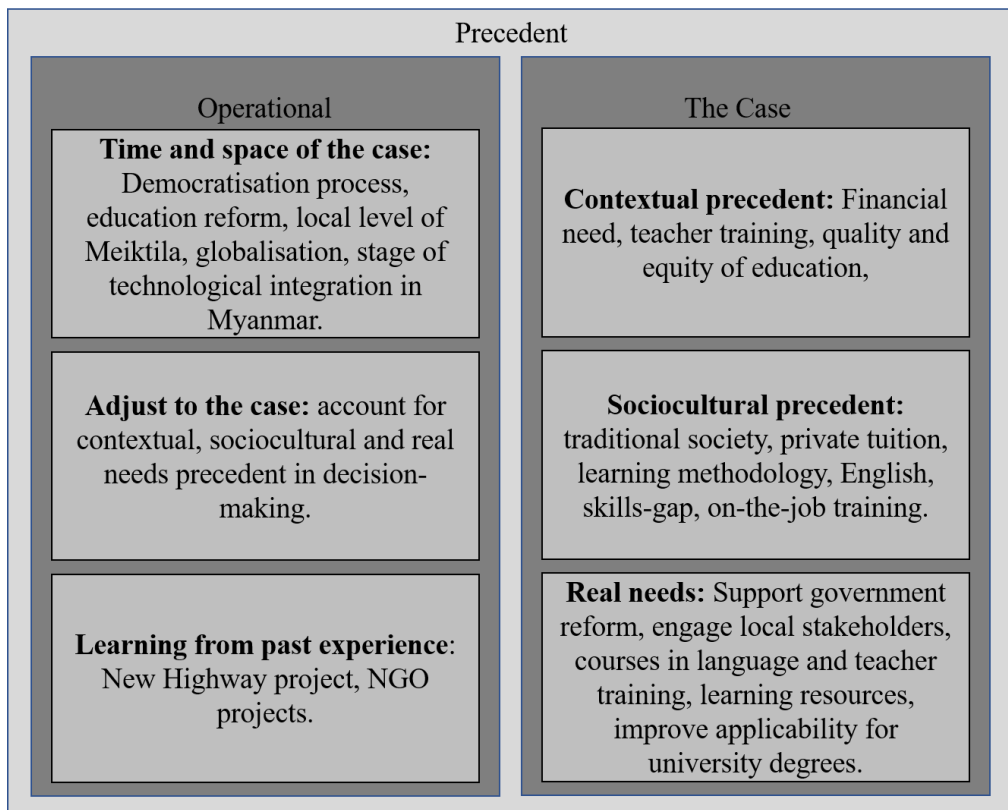
Figure 10: Precedent as a framework applied.

Following these aspects of precedent, the LAMTIB Initiative will be able to create an engaging and comprehensive module. The following sections will discuss how it might affect the cycle of poverty, and whether it can be considered sustainable by following the SDG 4 targets.

7.2. Cycle of poverty

The following section will discuss how such a precedent based approach will address the cycle of poverty, using the contextualised precedent already established. This way it will evaluate the Initiatives effect on poverty aliviation as put forward by the theory. It will address the four key aspects of the cycle, 7.2.1 Growing up in poverty, 7.2.2. Equity of education, 7.2.3. Limited employment opportunities, 7.2.4 Low pay and poverty in early adulthood, and finally 7.2.4 Create a family that experience poverty.

7.2.1. Growing Up in Poverty

Considering that one in three households are considered in poverty in Myanmar, it is then not surprising that there is such a high dropout rate once primary school seizes to be obligatory (The Businesses of a Better World, 2016). The 'fifth grade survival rate' is considerably low, as is the rate of those who go from high school to university. Even still, those who get university

degrees tend to do so because they have heavily invested in their education, something those in poverty are simply not able to do.

Another problem is the fact that one can only find adequate teacher-student ratios in private schools, leaving those unable to pay for the private schools to stuffed classrooms. Education can thus be a lose-lose situation for the poorest families, who might otherwise have been able to earn money from their children's work. Why would they send their child to a school where the only way they pass is through paying high fees, which then in the end are irrelevant to the work they will do, and thus require additional courses? It would be simpler to let them work from the start. LAMTIB can thus function as a way to lessen the negative side of the households' survival algorithm, when making the decision whether their child should work or go to school.

Thus, to alleviate this stage in the cycle of poverty, it is therefore clear that an Initiative in Education and TVET needs to make sure of one out of three options, or a combination of them. Firstly, that the people it hires can either send their children to school by giving a living wage, and thus making sure that children do not need to supplement their parents' income. Secondly, refrain from hiring personnel who continue to send their children to work rather than school. Or thirdly, establish a learning centre which enables the children to partake in tuition and learning, so that they can keep up with the more well-off students who pay for private tuition. The second option could be problematic, as it would bar the Initiative to hire many who live in poverty, without it also establishing option one and two.

7.2.2. Equity of Education and Skills Attainment

The fact that long distance students are less likely to attain postgraduate degrees further enforces the cycle of poverty. Those in lower-income families, which are more likely to take long distance education, are unable to climb the social hierarchical ladder through education. University degrees of any non-scientific kind are at the same time often completely irrelevant for the work one wish to do, and, do not give one the skills to do the job needed to do what one is being educated for. The exception is vocational courses such as polytechnic, computer science, and hotel and services education where the students could be sure to be employed upon graduating. However, only those able to get high marks, for which private tuition is a must, can enter such courses. Thus, there are no direct ways for lower-income or poor students to attain the skills needed to escape the poverty trap.

This situation could be alleviated by implementing solutions as suggested in 7.1, making it possible to work while attaining a degree. This way the students might see the value of their academic field, gain work experience which is a recognised part of a business, as well as help the Initiative grow without shortness of skilled staff.

Where those without education are able to find work, is in basic skills which can be trained in the matter of days or weeks in industrial zones. However, as these workers tend to job-hop depending on salary and type of work, it makes it difficult for this workgroup to attain more complicated skills. Enabling these workers to attend e-Learning courses might convince them to stay on longer and build a trust bond with them. Further, while the workers might leave to get work at a higher paid business later, it will have helped the poorest in society to achieve economic independence, a key aspect of LAMTIB.

7.2.3. Limited Employment Opportunities

While there are rather too many jobs for too few skilled personnel, there are also too few who attain applicable skills to what jobs they wish to work at. This means that those who can obtain certificates for skills, are able to pick among most positions. This is also further enabled through the fact that doctors are seen as the most intelligent in society, as they were able to attain such a high mark on their high school exam.

By giving quality based and equity focused courses in English, academic subjects, training for the work needed at LAMTIB as well as a private tuition like system, LAMTIB could greatly influence this situation locally in Meiktila. As LAMTIB is based semi-permanently until it is no longer needed, it will be able to give follow-up courses in ways the other NGOs are not, which as the New Highway Project showed, is essential. Those who attend these will thus be qualified to a range of work, should they wish to leave LAMTIB. Further, if the project expands to include access to non-LAMTIB personnel to its learning centre, it can have an even greater impact in the future.

7.2.4. Low Pay and Poverty in Early Adulthood

Considering the immense cost of private tuition and hostels, long-distance university students would have a difficult time escaping a low-income household. Additionally, if one is a day student, one is mostly unable to work unless one skips most of the semester, meaning one totally relies on one's household for financial matters. Only those who then do not go on to study at university are thus able to work and perhaps not experience poverty in early adulthood, without spending their savings on university related fees. However, this work tends to be only low-

skilled, basic and repetitive, which the salary also reflects. It is therefore unlikely that one is able to escape poverty as an early adult in Myanmar, unless one already came from a middle- or high-income background.

To address this issue, the e-Learning centre should focus on hiring young, enabling them to work to attain skills early. This can be done either through hiring long-distance students and giving them work experience or hiring dropouts who might benefit from comprehensive e-Learning technical training which can benefit them later. This will not only build technical and vocational skills pertaining to their work, but also ICT knowledge, opening them to other aspects of the internet as well as Facebook.

7.2.5. Create Family That Experiences Poverty

By addressing the three other aspects of the poverty cycle, LAMTIB will have already had a great impact on the lives of people in poverty. However, it will also then help break the cycle, and for people to escape the trap, by making the survival risk ratio low enough for education to be a viable option. Yet, poverty as a generational cycle means that the education Initiatives' effect might not be felt for quite some time. As a project, this might mean that investors find a low return on their investment, as the change is subtle and local. Either way, there is great potential in the LAMTIB Initiatives' education and TVET module to alleviate the poverty trap on the local level where they are based. However, this analysis does not address whether the Initiative will be sustainable.

7.3.   SDG 4

In order to find if the Initiative can be considered sustainable, and future oriented, the following section will analyse its applicability to the SDG 4 targets. Aunemo (2015) found that LAMTIB as an Initiative had a high convergence between their goals, and the SDGs. Specifically, she found high convergence between eight, or 47% of the goals, and medium convergence in five others (Aunemo, 2015). The high convergence categories were food, education, economic activity and renewable energy. She argues that LAMTIB has a '*strong potential as a significant actor on the post-2015 agenda*' (Aunemo, 2015, p. 82). A high convergence rate means that LAMTIB and partners can find new possibilities and influence policies. Medium convergence means that these aspects of the Initiative must be further developed, while low does not necessarily mean that the Initiative is weak, but rather is a reflection of the priorities of a small-scale actor (Aunemo, 2015).

However, Aunemo's (2015) assessment was made on the grounds of the Initiatives' future goals, rather than its reality. It was also project focused, rather than being able to take into account the local variations and niches a precedent approach such as this one is able to. It also considered several SDGs. This section will thus look at SDG 4s applicability to the current situation on the local level in Myanmar, as well as how the Initiative might affect this. This way, one can better see how the Initiative will help development on the local level. The section will refer back to table 2, the SDG 4 Targets (UN Web Services Section, 2018).

The first target of SDG 4 states that education should be completed by boys and girls in a free, equitable way. The education should also be of a high-quality standard in both primary and secondary education, which will lead to SDG 4 effective learning outcomes. Currently, education on both the primary and secondary level is 'free' in Myanmar. While there are few school fees, they are only provided 6 blank notebooks, and one school uniform (Munk Representative 2017, personal communication, 17th October). This is not enough to last a whole year, and in combination with private tuition, it becomes quite expensive for a household. Additionally, the quality and equity of the public education sector has been thoroughly discussed as inadequate.

Target 2 wishes to ensure that girls and boys have access to early childhood development of quality, with care and pre-primary education facilitating a transition to primary education. Several early childhood centres are being built by the government, and kindergarten is free and obligatory for all children in Myanmar. However, the Initiative will not focus on primary or secondary education in the first stages of education and TVET module implementation (S. Thet San 2017, personal communication, 2-17 October). Therefore, it will not directly affect target 1 or 2 which concerns itself with early childhood care and primary/secondary education. Yet, helping to break the cycle of poverty will help in enabling more children to attend the school system which is currently under reform. By enabling parents not to look at their children as economic entities, LAMTIB will enable more students to receive this education.

Target 3 stresses the need for women and men to have equal access to affordable and quality vocational, technical and tertiary education, this including university education. LAMTIB does not have a clear policy on gender inclusion, but so far, many women have been given roles mostly only reserved for men in society (Aunemo, 2015). Target 5 further admonishes that gender disparities in education must be eliminated. One must ensure equal access to all levels

of training and education. This also includes other vulnerable groups such as indigenous people, people with disabilities, as well as children.

The gender and disability aspect have not been thoroughly discussed in this study, as there is a relatively small percentage difference in female and male literacy and education attainment. However, there are gender issues in Myanmar, as it is a highly patriarchal society (Zaw-Aung, 2017). In terms of disabilities, there was simply not enough data available to make a comprehensive argument of the state of their livelihoods. When asked, students as well as teaching staff were unable to provide examples of disabled people attaining education, primary or higher. The exception was at the Sett Oo Monastic Education Middle School where they had taught children with '*missing limbs*' (U Nandar Cariya 2017, personal communication, 10th October).

Even more expressive was EMS who simply said that because of a lack of resources they '*cannot educate the disabled*' (Education Manager Source 2017, personal communication, 14th October). There was also talk of a school for the blind in Meiktila, but the school was not visited by the research team, and the researchers could thus not get any primary data on the topic. In secondary literature, only MIMU (2014) and Uke (2015) could be found on the state of disabled people in Myanmar outside of government statements. This does however not pertain to the task of this study, outside the bounds of admonishing that the Initiative treats people of different genders and abilities equally. Therefore, there are no set strategies in place to ensure equal education access, so far.

Target 4 wants to increase how many youth and adults have relevant skills in order to get employed, which includes vocational and technical skills, so that they may get employed and further establish entrepreneurships. Here, the LAMTIB Initiative is highly applicable. As Myanmar is experiencing a shortage of skilled labour, initiatives which address the issue, are highly popular. The e-Learning hub could address many skills and technical trainings which will further help the local community of Meiktila, and in the future, Myeik.

Target 6 focuses on the need for all youth and adults of any gender to achieve numeracy and literacy. The LAMTIB e-Learning hub will address this target. While literacy is exceptionally high at 90% of the adult population, there is still a need to ensure numeracy is learnt (Rockett, 2013). The e-Learning hub can provide courses to enable the teaching of these highly important aspects of education.

Target 7 stresses that knowledge and skills to enable people to understand as well as act in a sustainable way towards development are crucial. This includes education about what sustainable development is, as well as how one can live a sustainable lifestyle, their human rights, the promotion of peace, appreciation of cultural diversity, gender equality, global citizenship, as well as an understanding of how culture contributes to sustainable development.

Addressing this goal could potentially get political, which could explain the Initiative's low priority of several of these areas. However, as the Initiative will function as a sustainable business, the personnel connected to the Initiative will be learning about sustainable development through working there. Encouraging workers to learn about sustainable development and lifestyle through the e-Learning hub could also be effective.

Target 8 argues that better education facilities must be built, or the existing ones must be upgraded, to serve all genders, those with disabilities, and every child. These education centres must provide a nonviolent, inclusive, effective, and most of all, safe learning environment. While LAMTIB will not initially contribute by sponsoring funds to schools to upgrade, it can ensure that their own learning centre fulfils these requirements. By being aware and attentive to the needs of a varied population, the Initiative will gain social capital.

Target 9 wishes for scholarships given to developing countries to expand substantially. The target admonishes those able to give attention to the least developed nations, to do so. The scholarships should be both for higher education, TVET, engineering, scientific subjects, as well as ICT. This could be a potential future development of the Initiative but is not the short-term plan for the education and TVET module. However, Ms Soe Thet San showed interest in establishing such programs if the Initiative is financially able in the future (S. Thet San 2017, personal communication, 2-17 October).

Target 10 stresses that there is a significant need for more qualified teachers globally, which can be alleviated through international cooperation. Especially this is the case in the least developed countries. As discussed in previous sections, this need is especially clear in Myanmar. Consequentially, the Initiative can establish training courses which function over time, following in the contextual and sociocultural precedent found above. Therefore, this target is highly applicable to the LAMTIB Initiative.

7.4.   Convergence

Consequentially, targets 3, 5 and 9 can be considered of low or no convergence to the LAMTIB Initiative in its currents goals and implementation. Targets 1, 2 and 7 can be considered of

medium convergence, as they might be influenced indirectly, or be partly applicable. 4, 6, 8 and 10 on the other hand are highly applicable to the functioning of the LAMTIB Initiative. Therefore, the education and TVET module correlates to SDG 4 to some extent, engaging many of its key aspects.

However, as the Initiative is just launching and developing its processes, it is understandable that many aspects are still only partly addressed. Most of the low of non-convergences are in aspects related to gender, disability and indigenous inclusion, something which does not mean that they are not included, but that so far, the issue has yet to be addressed by LAMTIB management. Therefore, these should not be looked at as faults in the Initiative, but rather as specific aspects of policy which should be addressed.

8. Recommendations and limitations

The following chapter will make recommendations based on the discussion above, particularly in terms of decision-making and how this can be improved for the future. Its applicability for LAMTIB and similar initiatives is stressed. Lastly, there will be a discussion of the limitations of the study. The scope and time limitations are emphasised. Thus, the chapter concludes the discussion section of the thesis.

8.1. Recommendations

While some recommendations have already been made in terms of the LAMTIB Initiative and its education and TVET module, it has become clear throughout the thesis that a precedent bound approach to decision-making is highly needed. As projects such as the New Highway Project showed, understanding the sociocultural, contextual and real needs of society is crucial to the operations of any initiative. The precedent model also allows for a comprehensive, thick description of issues pertaining to the decision-making process. Thus, the subsequent decisions made regarding the education and TVET model will be able to consider a multitude of variables, as presented in the recognition and analysis chapter.

The Initiative should also further consider implementing this decision-making strategy to the other modules. A similar study could be hugely impactful also for the health care and food production modules. If a health care module is simply installed, it will take up space and energy, as well as require financial resources to implement. The same can be argued for implementing food production modules. Therefore, it is crucial to understand what the real needs are in society where they wish to implement. This can be found by following this precedented decision-making model, to find sociocultural, contextual and real needs precedent.

While the initiative could potentially greatly affect the cycle of poverty, it must not be considered a quick fix. The cycle is generational, and thus means initiatives and businesses alike must take heed to evaluate their time frame, and how much they are willing to invest of their time. There is also need for the initiatives to be comprehensive in nature. Although a few key aspects were recommended in chapter 7, these should not be seen as 'the solution' but rather as a starting point. One should be mindful of how society, context and needs might change not just because of the Initiative itself, but also because these factors might change rapidly in the future in Myanmar. Thus, time and space of the case is important factors to account for. Learning from past projects and adjusting to the case are therefore essential for the survival of initiatives such as LAMTIB on the local level in Myanmar.

Further research should be made in order to effectually develop the precedent decision-making model. Further, education on the local level in Burmese majority regions is lacking and tends to be overarching to the entire country itself. Research into the livelihoods of disabled people should be prioritised. Further, education in order to further critical thinking and critical use of sources should be prioritised in all initiatives.

8.2. Limitations

As the precedent framework is created by the researcher, there are limitations to its academic vigour. While the thesis has attempted to establish its applicability, as well as its usefulness, one might consider it underdeveloped because of the scope of the thesis. Additionally, the decision-making framework is employed in an innovative way, which might cause the same concerns.

The scope of the thesis might be considered too large for the thesis, as it required a considerable amount of work above what the thesis assignment initially calls for. Further, the study incorporated a large set of both primary and secondary data, requiring much time and effort from the researcher.

9. Conclusions

The thesis has highlighted two aspects of the decision-making process, firstly, the context in which the implementation of an education and TVET initiative might be implemented on the local level in Myanmar. Secondly, the thesis has concerned itself with operationalising a precedent based framework to aid in this process, so that the implementation might not only be successful, but also sustainable.

The thesis has thoroughly discussed not only how the education and TVET module of LAMTIB currently is, but also how it can be improved to further facilitate sustainable change in the local community where it is to be launched. By building its components on the sociocultural, contextual and real needs of the local community, the Initiative will have a holistic development approach.

The issues found in society on the local level, such as the need for teacher as well as student motivation need to be ensured, for the initiative to be successful. Further, the proper resources, a different learning methodology and employment of critical thinking skills will positively affect education on all levels. By considering the language and applicability issues, the Initiative might positively affect the student experience, as well as quality of education, to long-distance students who might have considered their degree only a necessity. The same can be said for the workers and other participants of the e-Learning hub, who might be able to access greater value chains and better work through such a program.

The on-the-job training system which is so prevalent in society can be used to the Initiative's advantage, as the primary vision for the learning hub is an ICT based one. Through videos which can be easily made thanks to the prevalence of smartphones, as well as online resources which can be downloaded and shared to participants, the repeating behaviour could be used, without focusing on rote learning.

The negative and positive aspects of the education and TVET module was evaluated using its applicability to the cycle of poverty as well as SDG 4. As sections 7.2 and 7.3 showed, there is a high convergence between the Initiative and these development aspects. It is highly likely that LAMTIB at launch of this module, could have a considerable effect on the community in Meiktila, Myanmar. While some aspects, like early childhood development lays beyond the scope of the Initiative at this stage, it does not mean it will not further develop in this direction. Doing so, and additionally addressing the need for an official policy on gender, disabled and indigenous equitable access, much will be done.

While the issues in education in Myanmar will not be solved by implementing this Initiative, it could greatly influence the state of poor and low-income households in Meiktila. Thus, as the stated goals of the Initiative, the module will have fulfilled its purpose. With that, so has the study fulfilled its own.

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Appendix A

Interview guide and major themes

Phase 1: Creating the framework.

1. Introductions acknowledge position of interviewee. (5 min)
2. Information: Theme for the interview, the background and purpose of it. (5-10 min)

    Explain:

    a. What will the interview be used for?
    b. Confidentiality and anonymity – form.
    c. Ask if anything is unclear, or if there are any questions.
    d. Ask for consent for sound recording (described in the consent form).

Recording begins.

Phase 2: Experiences

3. Transition questions: (15 min)

    a. "What is your experience with working with access to education/training of skilled workers/getting relevant internships in Myanmar."
    b. Describe the three key characteristics to the situation in Myanmar today in your local environment.
    c. Follow-up questions to answer, dig deeper into their experience.

Phase 3: Focus

4. Key questions (50-60 min+)
5. Key questions will differ for each specific group.

    a. Students at university/student council and/or teachers:

        After describing LAMTIBs vision regarding internships:

        i. "Are there any similar programs of internship collaboration in the private sector? Where/what/why not?"
        ii. "Is there an interest in programs such as this in the student base?"
        iii. "How is the current situation regarding outreach to smaller villages and basic education in English and maths?"
        iv. "Any particular obstacles in regard to these?"
        v. "Any particular places or reasons why access is better here/there?"

  b. Workers and employees of LAMTIB:

    i. "Tell me about the idea behind the educational program being part of LAMTIB, was it always intended? Major areas of focus, and why?"

    ii. "What would you see as being most helpful regarding training of workers on site? What is your vision both abstract and practical?"

    iii. "How would an educational program (describe) influence your choice of workplace?"

6. This is a collection of a few major groups; more specific questions will of course be made specified to each interviewee.

7. Follow-up questions at every level.

Phase 4: Reflection

8. Summarise the interview.

  a. Did I understand you correctly in ___?

  b. Anything you would like to add?

Appendix B

Request for participation in research project

" Implementation of educational programs in rural villages in Myanmar: a case study of LAMTIB SEM."

The request has three pages; background and participation; treatment of personal information and contact details; signature and acknowledgement. Please read all the information carefully, if anything is unclear this can also be done orally.

Background and purpose

The project will be developed into a master thesis, and a semester rapport. This is done for the Norwegian University of Science and Technology, Department of Industrial Economics and Technology Management. The research for the thesis and rapport is done as part of my internship at the LAMTIB initiative (Leapfrogging Autonomous Micro- Technopolis In Boxes), a company which has developed a solution to many of the issues put down in the United Nations Sustainable Development Goals. LAMTIB wishes to include an educational program, which is currently being developed with the help of these interviews. The data gained from the interviews thus have three end products: semester rapport, master thesis, and development of the educational program for LAMTIB.

The project will in broad strokes focus on implementation of educational programs in Myanmar, with special focus on rural villages, training of unskilled workers, and basic education programs for children unable to attend normal school progression. The aim is to gather enough data to give an adequate and fair representation of A: the educational programs currently in Myanmar, and B: the educational program LAMTIB is establishing, and their challenges and key characteristics.

The informants have been chosen based upon relevance through association, personal and professional networks of the researcher and LAMTIB, and online research. Each interviewee has unique insight into the situation being researched, and thus can add unique perspectives to the end products.

What does participation entail?

Participants have three choices on how to participate in the project:

In the first instance, participants will be offered an interview. These will be semi-structured, with some prepared questions on the themes discussed above. The questions are open, and participants are free to answer as broad, long or short as they are comfortable with. An example is: "Where does your organisation, and/or yourself see room for improvement in your outreach? And are there any steps ready to tackle this?"

A second alternative is an online questionnaire with much the same questions, for those who wish to participate, but in some way are unable during my stay in Myanmar. A link will be sent upon voluntary request from the participant. The questionnaire will include its own consent section.

Thirdly, it is likely that post-trip there might be follow-up questions based on the data gathered. The participants can on a voluntary basis join in this second data gathering, by answering follow-up questions either through email or questionnaire. A link and/or email will be sent upon voluntary request from the participant (see page 3). Request for participation in research project

Further information will be gathered from academic journals, rapports from international and national organisations (example: UNESCO), and online websites.

The data will be either written down on paper, electronically, or sound recorded.

How is personal information treated?

All personal information will be confidential, only the information which has been checked on page 3 will be applicable to publication. This means: name, email address, workplace, work title, and other applicable information. Before finalisation of the project only my supervisor John Eilif Hermansen and myself will have access to personal information and interview material/rapports. To ensure confidentiality the material is saved on my personal computer, with security backups on mobile storage devices. The list of personal information is also saved in a separate password protected folder on my personal device.

The project is scheduled to be finalised 01 June 2018. At finalisation, the recordings and other material will be anonymised, if this changes the participants will be contacted to confirm consent of continued record of their personal information.

Voluntary participation

Participation is voluntary, and consent can at any time be withdrawn without explanation. If the participant chooses to withdraw themselves from the project, all information will be anonymised.

If there are any questions, please contact:

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The project adheres to Norwegian centre for research data AS (NSD) guidelines. Request for participation in research project

Consent to participation in the project

Please tick the boxes applicable:

I, the participant, consent to the following personal information being used in the publication and finalisation in the end products of the project as outlined above: **name, email, workplace, work title, work location.** Please strike out non-applicable or unwanted data points.

I, the participant, consent to partake in an interview as outlined above. Alternatively, a voluntary online questionnaire, sent to my email. Circle applicable.

I, the participant, consent to being sent follow-up questions to my email, to be answered voluntarily either through email or online questionnaire.

If applicable, add preferred email here: _____

I have received information about the project, and give my consent to participate:

(Signed by participant, and date)

Appendix C

Primary data – Sources.

Soe Thet San, LAMTIB Myanmar country manager, translator.

Soe Thet San was a continuing part of the research process, and often made remarks which were useful to understanding the education system.

Daw Kyu Kyu Thinn, General manager, UPT Electric & Electronic Cooperative Company Ltd.

We visited the company's factory for electric transformers. The company was one of the first of its kind and had substantial influence before a worker of the company left and started a competing producer. Now they still attain some requests but there is a lack of will in the family to further develop the technology, which has not changed since it was conceived sometime pre-2000s.

Kyi Lwin Oo, Save The Children Education Consortium.

The education consortium is a separate organisation from Save The Children, in that they have their own managing partner and director. They use Save The Children's offices, HR, ethics policies and gain financial aid from them.

Malar San, UNICEF Education Officer.

UNICEF runs several education programs in Myanmar, which hopes to promote quality education. From 2011 to 2016 they had a program for early childhood and primary education, focusing on quality and equity. They also provided non-formal education and life skills to adolescents, as well as humanitarian aid. This was done through education centres. 2016 June the program ended as the donors did not wish to continue, Denmark and the EU still supports some of the functions which are still running from the program.

Dr Kyaw Moe Tun, Executive Director, Parami Institute.

Dr Kyaw Moe Tun created the Parami Institute in cooperation with partners from Yale.

Khaing Zin Win, Parami Institute Student.

Khaing Zin Win was a student at the institute, where she studied English Business Management.

Myo Swe, Manager, Meiktila Christian Orphanage.

The orphanage was just outside Meiktila town and had kids of most all ethnic groups. Most children were in primary school age. It was funded through donations and the personal income of Myo Swe and his family members. All children were sent to the local school if they were able to attend. Some, two children, did not attend school. The orphanage provides the children with accommodations, food and cares for their wellbeing. The youngest children the orphanage takes in are 10 years old, unless other circumstances make them take in younger children. The children are usually sent to the orphanage from pastors around Myanmar, explaining why there is such a varied ethnic mix. Every religion is accepted. Combined, the children eat around 1.5 pounds of rice a day, a high expense for the orphanage.

Helping Hand, Local Education for the poor donation organisation.

The Helping hand organisation handles the donations collected from the community and members and gives it to education and health centres for children in need.

Monastery Representative, Meiktila Buddhist Nun Monastery Education Centre.

The monetary was part orphanage part education monastic education centre.

U Zaw Myint, Headworker for Thet San family oil business.

U Zaw Myint worked as the chief technician and oil mill manager. In 2011 they had 7-8 workers employed under him. It was a good time for business then. Now he does everything on his own. 20 litres of oil are milled every day, they could do more but there is no demand.

Long Distance University Student A, Anonymised student of English.

LD student A worked currently as a midwife at a hospital in Mandalay. She was in her final year as a LD student in English. She was staying at a local hostel, accommodation specialising in LD students

The interview is stopped by the hostel manager and the teacher giving private tuition. It is unclear why it was stopped, or what aspect of the questioning they saw as inappropriate. See section 4.7.1 of the thesis. However, Ms Soe Thet San attempted to explain that they were afraid of the unforeseen consequences of our questions. They were afraid we would post about it on the internet.

Long Distance University Student B, Anonymous student of Geography.

LD student B also lived in a hostel accommodation for LD students. Her interview was done on the 08/10/2017, but upon meeting her again on 09/10/2017 we continued our interview. The first interview was done under supervision of the hostel manager and women of the household. One can thus assume a certain amount of pressure to describe it favourably. The hostel manager was not averse to the research as she herself had been abroad. The most critical information was given during our second meeting.

Village focus group, Wun Dwin Township, Ohm ma dwae Village.

Ohm ma dwae Village is found just outside Meiktila, where they have substantial rice paddy fields. The village is considered one of the more fortunate, as it earns well on this enterprise. We decided to interview a village such as this so that we could get the perspective of people which LAMTIB would try to recruit as labourers. The village has been inherited down for over 3 generations, and more years than they could remember. There is a small school close to the village for the children in it and nearby villages. All the participants were women, of every age. Some were grandmothers, some had children, some had just began attending university, others had just graduated from high school and were working. The older women all finished primary school, while their daughters graduated high school and some university. The village was the home of U Zaw Myint's wife, and she often comes to visit.

Ko Tun Zaw Moe, Mr Linn Café manager and owner.

Ko Tun Zaw Moe, as an established and successful businessman who has spent time abroad in Japan, was very open to the research team's questions. As he owns a teashop and café, both called Mr Linn, many of his employees are young, some below the national legal age. The parents come and give consent for their children to work there

Myo Thawta Win, Private School, Principal/Academic Affairs

The private school Myo Thawta Win is the principal of academic affairs for, is considered of very high standard in Meiktila. Teachers there have taught many high achieving students, such as Ms Soe Thet San and the children of successful business actors in the town. They also hire teachers internationally.

U Nandar Cariya, Sett Oo Monastic Education, Middle School.

We were met by the headmaster monk of Sett Oo Monastic Education Middle School, who is also the secretary of monastic education in Meiktila. This school focus on primary school children. Many graduates have great accomplishments, such as doctors and military engineers.

University Professor, Anonymous Source

The last informant in Meiktila was a university professor who was very vary of talking to the research team. He was afraid of repercussions from the university. He was the head of an academic department, and thus had responsibilities in keeping a good image of the school. The professor often refrained from answering the questions directly, or at all, by saying she was not able to discuss certain topics. His position meant organisation of the department, teaching and research. He made the schedule for postgraduate students in his department.

Teacher Source, Anonymous Source

This teacher source was interviewed in Dawei, while friendly they were not available for a formal interview, and the comments made here are from conversations which we were allowed to write down.

University Student Focus Group (USFGa), Student representatives from universities in Dawei. Long Distance and day students.

The focus group consisted of unnamed representatives from the Dawei university student union and Dawei computer university student union. They had been in conversations with their universities about the interview and participation in the research. The interview was done in a local café, where we were alone but for an adult person which sat on the table next to us, which had come with the students and talked with them before the focus group began but did not make attempts to make contact with us or the students when they sat down at our table.

Education Manager Source, Anonymous Source.

This source was a manager in the education sector, he is part of developing the teacher training programs and have long been part of the industry. While usually, he would have had to write a report to the local government about the fact that he was talking to the researcher, he included our research group in with a previous foreign research group from a large NGO who had been there the same day, allowing him to talk with us. He has been in the teaching profession for 31 years, and in 2002 he joined the institution he currently works at.

University Students Focus Group (USFGb), Student representatives from universities in Myeik, Long Distance and day students.

This focus group was a selection of university students from Dawei university. Some were representatives from the student union. 3 of the students were LD students, the others were day

students. As the LD students lived in accommodation with strict curfew, we separated the groups to gain the most information from everyone. Most of the LD students had work besides studying, one worked for their family business, one worked with computers, and the last LD student did not have work.

Dr. Mar Too Nyi Bu, Executive Academic Advisor, hospitality and Catering Training Academy, Daw Khin Khin Kyi Foundation.

The hospitality and catering training academy is one of the official degree vocational programs in Myanmar. It opened under the blessing of Aung San Suu Kyi. The students are in the age of 18-25 and all have high school diplomas, they must apply using their matriculation exam marks. They learn both theory and practice of their subjects for a year, and then spend 8 months doing an internship at a hotel or other such establishment often in Yangon. Hotels often request interns from the academy. They have around 110 places each year, but over 200-300 potential students apply. Their graduates are hired by 5-star hotels. They get a certificate and are taught by professional teachers. The specialisations include; culinary, hotel operations, and housekeeping.

Munk Representative, Myin Thar Myo Oo Child Development & Monastic Education School.

This monastery was found inside the city of Yangon, and had several large buildings, with many students as well as young monks and monk administrators. We were able to speak to a high-ranking member of the monastery, who oversaw education there.

Alan Lee, LAMTIB aquaculture biologist.

Mr Alan Lee was part of the Singapore office, and was mostly in charge of the Philippines site, where they develop the HIC. He talked about Philippines with the researcher, which unfortunately is not relevant for this thesis.