

Strengthening Pre-Service Teacher Education in Myanmar Review Report

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Acronyms

ATEO	Assistant Township Education Officers
CESR	Comprehensive Education Sector Review
CPD	Continuous Professional Development
DBE	Department of Basic Education
DDG	Deputy Director General
DERPT	Department of Educational Research, Planning and Training
DFAT	Department of Foreign Affairs and Trade
DG	Director General
DHE	Department of Higher Education
DHREP	Department of Human Resources and Educational Planning
DMER	Department Myanmar Education Research
DTET	Department of Teachers Education and Training
EC	Education College
ICT	Information and Communication Technology
JICA	Japan International Cooperation Agency
KEQ	Key Evaluation Question
MoE	Ministry of Education
NEL	National Education Law
NEPC	National Education Policy Commission
NESP	National Education Sector Plan
NLD	National League for Democracy
PTTP	Pre-Service Teacher Training Program
QBEP	Quality Basic Education Program
SC	Steering Committee
STEM	Strengthening Pre-Service Teacher Education in Myanmar
TA	Technical Advisor
TCF	Teacher Competency Framework
TCSF	Teacher Competency Standards Framework
TEO	Township Education officers
UNESCO	United Nations Education Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
WB	World Bank
YUOE	Yangon University of Education

Executive Summary

In partnership with the Government of Australia, the United Nations Education Scientific and Cultural Organisations (UNESCO) Strengthening Pre-Service Teacher Education in Myanmar (STEM) program has been working with the Myanmar Government Ministry of Education (MoE) since July 2014 to address critical issues in pre-service teacher education. Through STEM, UNESCO has provided the MoE with technical and capacity-building support for the development of key teacher policy frameworks, the restructure and redesign of pre-service teacher education curriculum and programs, and the strengthening of Education College institutional management and Information and Communication Technology.

As the primary donor to the STEM, the Australian Government Department of Foreign Affairs and Trade (DFAT) commissioned a review to assess the overall progress of the program under Phase One. The scope of the review is limited to the period July 2014 to March 2017. It focuses on key products and the nature of the partnership between UNESCO, the MoE and other partners. The findings of the review will be used to inform the ongoing implementation of STEM under Phase One and support key management decisions related to Phase Two of the program.

The key findings of the review are:

- The **program focuses on outputs which are fundamental to the education sector** and have the potential to influence the reform agenda¹. The Teacher Competency Standards Framework (TCSF) for example will influence the focus of pre and in-service teaching in Myanmar and donor investments in the education sector.
- The program is delivered by **a suitably resourced team** with team members with appropriate skills, knowledge and experience. The program team could be more effective if it leveraged its partnerships and networks better. In particular the program's cohesion could be improved as well as its ability to contribute to potential system wide change.
- The program products could better reflect **gender equality and social inclusion** principles. The program products could better align to the social inclusion guidance already included in Myanmar's existing education policies. The guidance in these policies is limited to some aspects of social inclusion and does not go far enough in considering gender equality, ethnic linguistic diversity and disability inclusion.
- The **implementability** of the program products in the current Myanmar context is likely to face some challenges. Involvement of a broader range of MoE departments in the development of the program products would improve their implementation.

The recommendations are focused on improvements for STEM which are applicable to both STEM 1 and STEM 2. The recommendations are supported by a rationale and linked to findings in the report. It should be noted that these recommendations were developed at the whole of program level rather than against each key evaluation question. The recommendations of this review include:

1. **Establishing a steering committee** for the program to better enable systemic change through the program, strategic positioning of the program and influence for the program. The Steering committee's membership will need to be carefully considered to ensure representation from all relevant parts of MoE, DFAT and UNESCO

¹ The TCSF constitutes a potential trigger for reform of current education legislation and policy as these were developed prior to Myanmar having a TCSF.

2. **Look for opportunities to further include in the core STEM documents gender equality, ethnic linguistic diversity and disability inclusion.** At a minimum, the STEM core documents should reflect the inclusion language in the National Education Law and National Education Strategic Plan. The program may also identify opportunities where it is possible to reach further than these policies in the core STEM documents to support teacher competencies that truly realise access for all children.
3. **Leveraging UNESCO's extensive expert educational network and other Myanmar based expertise** (such as the World Bank, British Council) to access the most pertinent, relevant and leading technical advice for the program. This includes gender and social inclusion expertise.

1. Introduction

1.1. Purpose of the review

As the primary donor to the Strengthening Pre-Service Teacher Education in Myanmar (STEM), DFAT commissioned a review to assess the overall progress of the program under Phase One. The scope of the review is limited to the period July 2014 to March 2017, when this review took place, and focuses on key products and the nature of the partnership between United Nations Education Scientific and Cultural Organisation (UNESCO), the Ministry of Education (MoE) and other partners.

The findings of the review will be used to inform the ongoing implementation of STEM under Phase One and to support key management decisions related to Phase Two of the program. The primary audience for the review is the DFAT post in Myanmar. The review findings will also be shared with UNESCO and the MoE.

The review sought to answer the following criteria and associated questions:

Relevance:

1. How relevant are the STEM products and activities to the Myanmar context?
2. How responsive has the program been to changing government priorities?

Efficiency:

3. How well has the program been delivered so far?
4. How well have the partnerships supported the program?

Cross-cutting issues:

5. Have cross-cutting and related issues (particularly gender equality, inclusiveness and child protection) been adequately addressed in key documents?

Effectiveness and impact

6. How effective has the program been in delivering on expected outcomes? This question also considered what other impacts the program achieved.

1.2. Methodology and limitations

The review used a collaborative mixed methods iterative methodology, with sequential data collection (desktop review followed by interviews, site visits, observations and a further document review) and includes a separate document review by a social inclusion specialist. The review methodology was developed in consultation with DFAT (the terms of reference can be found in Annex 5.3). The data sources (Annex 5.2) and respective data collection methods for the review included:

- Interviews (individual and group) with informants (Annex 5.2) including representatives from UNESCO, DFAT, MoE, a number of education government departments, universities, Education Colleges, local and international consultants and other development actors operating in the education sector.

- Observations through two site visits at Mandalay Education College and Yankin Education College; the team was also able to attend and observe a program activity (Working Group workshop for the four year curriculum).
- Document review of program documents. An initial list was added to during the consultation as other relevant documents were identified (Annex 5.2).

The methodology had four steps which are detailed in figure 1 below. The review team included education and evaluation experts, a DFAT regional social inclusion expert and an interpreter with a background in education to support interviews (individual and group interviews) with non-English speaking informants.

The data collected was analysed and then collated (instruments are cross-referenced to KEQs and sub-questions). The review team completed an initial thematic analysis² to identify recurrent themes, the results of which were compared, contrasted and triangulated against the KEQs (which provide the analytical framework for the review) to produce findings and draft recommendations. The analysis of the results is captured in an evidence table in Annex 5.1.

The review was originally intended as an internal review. This published report has been edited to remove review questions, evidence and findings not appropriate for publication and as a result some gaps in the report narrative may be apparent. The data collection for the review was conducted over a brief period of time limiting the ability of the team to visit the range of sites that the program is assisting. This was mitigated by using existing documentation, recognising that a good quantity and quality of data had already been provided by UNESCO.

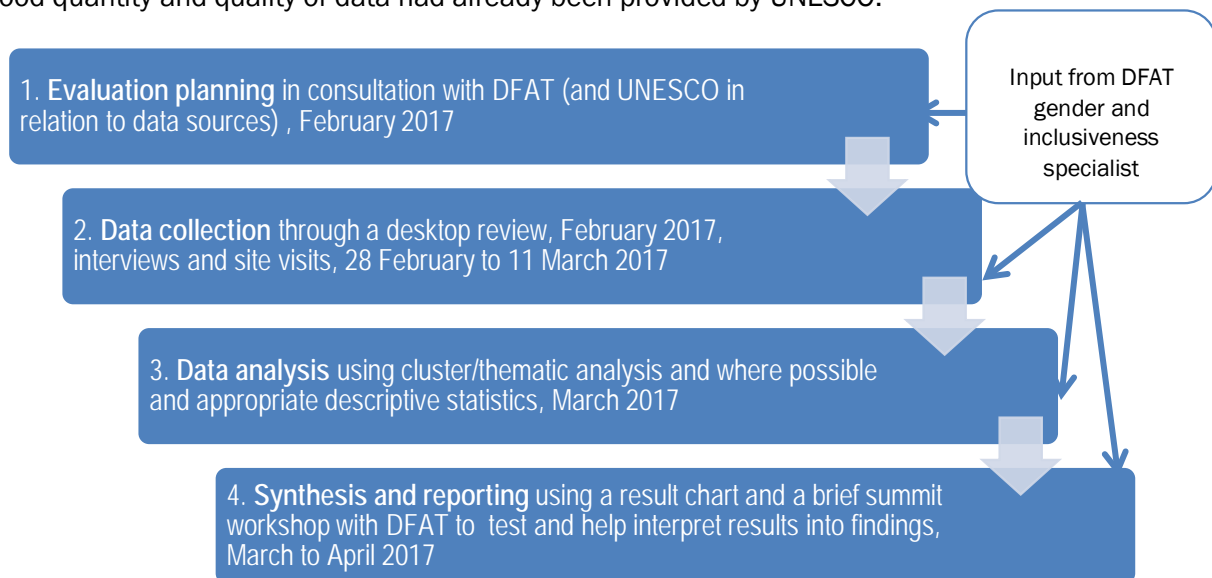


Figure 1. Review methodology steps

The team adhered to normal ethical standards during the evaluation, following the Australasian Evaluation Society *Guidelines for the Ethical Conduct of Evaluations*. The team informed all interview participants of the purpose of the evaluation and how the information will be used. Participants were assured that their responses were anonymous and voluntary.

² 'Thematic Analysis' looks at the content of the material that is 'what is said' more so than 'how it is said'. Thematic analysis can either be deductive or inductive in its approach. That is, data can be clustered from a grounded theory approach, where themes emerge from the data itself. On the other hand, thematic analysis can be used with predetermined themes. Often a combination of both approaches is used. In this case, we used both a deductive and inductive approach.

1.3. Content of this report

This report includes the following sections and information:

- A section on the Myanmar context and a description of the program
- A section on the findings from the review and recommendations
- Annexes including an evidence table which maps the results from our analysis to the findings used in the discussion, the data sources for the review and the Terms of Reference for this review.

2. Background

2.1. Myanmar context

This section provides a description of the education context in Myanmar in which the STEM program is being delivered. The information presented in this section was drawn from a review of program and government documents, observations made during two site visits and responses from the consultations with UNESCO, the World Bank (WB), donors and representatives from the Myanmar education sector and students. This is by no means an exhaustive presentation on the Myanmar education context but rather draws out themes of interest to this review, which either provide important contextual information or were highlighted by individuals consulted as important.

The comments fell into three key areas a) the current legislative and policy context for education, b) the demand and supply of teachers and c) the Education Colleges (EC) in Myanmar³. A few key current challenges, identified by interviewees, are also captured here.

Legislative and policy context

Since taking office in April 2016, the Myanmar National League for Democracy Government announced that improving the quality of teachers was to be a priority within their reform agenda. Significant progress has been made since then. This includes the beginnings of a legislative framework for teacher education with the *National Education Law* and several references to teacher education throughout other laws and policies⁴. However, no cohesive and comprehensive framework, under which clear teacher education policies and strategies are articulated, has been developed. Under the *National Education Law*, a planned teacher education council has not eventuated but is expected to in the near future.

As such, there is no high-level coordinating mechanism for teacher education. In other countries, coordinating mechanisms are used to ensure coherence and coordination across the education sector. Such coordinating systems vary from the creation of external inspectorate bodies to assess quality, through to school-based quality assurance systems. The absence of a high-level coordinating mechanism for teacher education has resulted in responsibility for planning for teacher education becoming spread across several departments. The Department of Higher Education (DHE) is responsible for the EC and DTET administers some in-service training, while other forms of in-service training⁵ are administered by the Department of Basic Education (DBE) and the Department of Educational Research, Planning and Training (DERPT).

Launched in February 2017, the *National Education Strategic Plan* (NESP) identifies teacher education and management as one of its nine transformational shifts. It specifically refers to the establishment of a Teacher Competency Framework (TCF)⁶ as a fundamental component of a teacher quality assurance system where competence is assessed against standard teacher competencies outlined by the MoE.

³ These comments emerged from the thematic analysis of the data collected through the document review and consultations.

⁴ National Education Law (2014), National Education Law Amendment (2015), National Strategic Plan 2016 – 2021, CESR Phase 2 Teacher Education Reports;

⁵ Training that is given to employees during the course of employment

⁶ The TCSF has the potential to provide a mechanism for alignment between pre and in-service education.

Demand and supply of teachers

MoE has limited data on the demand for and supply of teachers. When interviewees were asked about the numbers of teachers produced each year by the EC the responses varied between 6,000 and 10,000. Although none of the interviewees knew how many teachers were needed across Myanmar (some estimated the need to be between 15,000 and 20,000) they all agreed that the current supply of teachers was insufficient to meet the demand for both primary and secondary teachers. The lack of data was thought to limit the government's ability to plan, with MoE allocating five teachers per primary school regardless of the number of students. All interviewees expect the demand for teachers to increase across the system as the school years are expanded to include kindergarten plus 12 years of schooling and when the ECs transition from a two to a four-year teacher education curriculum. The transition will slow the production rate of new graduates.

Education colleges

Currently there are multiple ways in which someone can become a qualified teacher in Myanmar, which include:

- Pre-service Teacher Education⁷;
 - a two-year diploma at one of the 25 Education Colleges throughout the country⁸;
 - a five-year university degree (Bachelor of Education) offered at Universities of Education.
 - a post-graduate course (Pre-service Primary Teacher Training) offered through Education Colleges
- In-service Teacher Education;
 - a one-year correspondence course for Primary and Lower Secondary teachers administered by the Education Colleges; or
 - a one-year correspondence course for Upper Secondary teachers administered by the Universities of Education.

The current curriculum for teachers in ECs focuses on the topic to be taught, it includes some theory of teaching and very little practical experience. We were told that in practice, student teachers had between 10 and 20 days experience in schools and much of this was spent observing rather than teaching⁹. The current curriculum is crowded with 17 subjects covered in the first year and 14 in the second year. Teachers are assessed through tutorials and two exams over the two years.

Thirty years ago, a very different system was in place. To become a teacher, students would undertake a one year teacher training diploma after completing their bachelor degree. At the time, the course was focused on how to teach and not on the subject content and included a lot of practical activities and group work. It was reported that this was changed approximately 25 years ago to enable more career pathways for lecturers. With the establishment of ECs, those

⁷ Training which happens prior to employment.

⁸ Of these 25 ECs, three (Kyenton, Katha, and Hakha) have just recently been established and are scheduled to begin operating later in 2017, and some will only be at full capacity in 2018.

⁹ Many writers point out that an extended period is of more value e.g. "an extended practicum experience" could make pre-service teachers "extraordinarily well prepared" (Darling-Hammond, 2006, p. 305 in Li 2014) for their future teaching.

wishing to work in education at tertiary level could choose whether to work in universities or in the colleges.

The ECs have in the past been largely ignored by institutions within Myanmar's educational hierarchy. ECs have extremely limited budgets, outdated curricula and textbooks, and inadequate teaching and learning resources. The teacher student ratio is between 35-40 students per teacher, although we observed larger classes during both site visits where the ratio was between 40-55 students per teacher¹⁰. Interestingly, many believed that teacher educators were overworked (had no spare capacity), but at one EC it was reported that teacher educators spent only 2 hours and 50 minutes a week teaching¹¹. The rest of the time was spent preparing classes, marking correspondence work from in-service teachers and Continuous Professional Development (CPD) activities accessed through the Japan International Cooperation Agency (JICA) and the British Council¹².

Information and Communication Technology (ICT) classes are offered in all ECs. The ICT teacher trainers teach basic Microsoft programs (Word, Excel and PowerPoint) with training handbooks that are out of date (e.g. Word 2003). Student teachers have access to computers during these classes although often on a shared basis. The lack of reliable electricity supply and non-functioning computers (at one EC visited, approximately a quarter of the computers were not functional) means that practical hands on training is not always possible. The trainers are also responsible for fixing the computers when they break and support the EC staff to do their own computer related work. This places a considerable burden on them.

Commonly identified challenges

Several challenges with the current teacher and school management cohort were identified by interviewees:

- **Unqualified teachers.** It is estimated that 25% of Myanmar's teachers are not qualified.
- **Inexperienced graduates.** New graduates from ECs are young (between 18 and 19 years old and in rural areas can be as young as 15 and 16 years old) and lack teaching experience, with practical experience limited to observations.
- **Promotion system follows schooling structure.** Primary schools are mostly staffed with the less experienced and capable teachers. The promotional system is based on the schooling structure with the newly graduated or hired teachers starting in primary schools and promoted to secondary school teaching positions.
- **School leadership positions receive inadequate training.** The leadership (head teachers), management and assessment (Township Education Officers (TEO) and Assistant Township Education Officers (ATEO)) positions within the school system are not provided with relevant training and are overloaded with administrative tasks. Examples of relevant training includes management and leadership training for head teachers.

¹⁰ This is supported by the average class size reported (p.28) in the Management of Education Colleges in Myanmar Review Report (2016) where informants reported between 40-60 students per class.

¹¹ Management of Education Colleges in Myanmar Review Report (2016) p28. "It was found that, on average, EC teaching staff teach about 6.7 periods (1 period is 45 minutes) per week. The minimum number of teaching hours reported in the interviews was four periods per week, and the maximum was 15 periods per week."

¹² The British Council provides lecturers with classes in English language as well as workshops to improve their own teaching. JICA offers a number of professional development opportunities including how to train teachers in maths and science

2.2. Description of STEM

In partnership with the Government of Australia, the United Nations Education Scientific and Cultural Organisation's (UNESCO) Strengthening Pre-Service Teacher Education in Myanmar (STEM) project has been working with the MoE since July 2014 to address critical issues in pre-service teacher education. Through STEM, UNESCO has provided the MoE with technical and capacity-building support for the development of key teacher policy frameworks, the restructure and redesign of pre-service teacher education curriculum and programs, and the strengthening of EC institutional management and ICT.

History of STEM

STEM was originally conceived of as one component of the multi-donor 'Quality Basic Education Program' (QBEP). Australia was a significant donor to QBEP from 2012. QBEP consisted of three components with different organisations having responsibility. United Nations Children's Fund (UNICEF) had responsibility for Output 1 (policy) and UNESCO had responsibility for delivering Outputs 2 (curriculum/pedagogy) and Output 3 (management). STEM was in effect Output 2.

Under the QBEP, STEM was initially intended to focus on four pilot ECs. However, in early discussions with MoE, it was requested that as far as possible all ECs in Myanmar should be involved in project activities. UNESCO responded to this by expanding activities to all ECs. This meant ensuring full geographic coverage in field visits for assessment reports and reviews, consulting all EC principals on project deliverables, and formulating core teams from all ECs. It also became clear early in project implementation that the two Comprehensive Education Sector Review (CESR) reports¹³ commissioned by UNICEF in 2013 under Output 1 were not sufficient to address the need for ongoing teacher policy dialogue to ensure sustainable systems change.

In 2014 Australia moved to a direct funding partnership with UNESCO for the implementation of STEM, independent of the QBEP program. The new agreement with UNESCO for STEM Phase One was signed on 20 January 2014 and in July of the same year the official project was launched.

STEM Phase One (2014-2017) focuses on three outcome areas:

- teacher policy,
- curriculum and pedagogy,
- management and ICT.

Despite a challenging operating environment, STEM has made considerable progress which includes the following:

- the current curriculum at ECs has been reviewed and a new two year diploma curriculum has been proposed;
- the curriculum framework for a four-year degree program for basic and middle school teachers has been drafted;
- a teacher competency framework has been drafted using a participatory process;

¹³ Hardman, F. et al. (2013). *Development of a Teacher Education Strategy Framework Linked to Pre and In-Service Teacher Training in Myanmar*, UNICEF Myanmar; Ogawa, Keiichi and Team. (2013). *A Study of the Comprehensive Assessment of Selected Educational Colleges in Myanmar*, UNICEF Myanmar.

- an ICT subject has been developed and is being delivered in all ECs, each EC now has two to three ICT tutors and the program is continuing to support the capacity building of ICT teachers through training, the installation of internet infrastructure in all ECs and the development of an e-portal.

However, implementation of STEM has not been without its challenges. The period of political transition following the 2015 election through to the change of government in April 2016 led to another restructure¹⁴ of the MoE that resulted in delays for the program. Several important policy decisions and approvals were deferred until the establishment of the National Education Policy Commission (NEPC) in October 2016.

Capacity within the MoE to take on evidence-based teacher education reforms and the understanding of the fundamentals of teacher education and curriculum development at all levels is still developing and needs continued support.

Australia granted two no-cost extensions, a first extension was granted in August 2015 adjusting the end date to March 2017 and a second extension was granted until December 2017 to allow time to mitigate these challenges and respond to recommendations made by a project review completed in 2015.

The current context of STEM

In the progress report submitted in December 2016, UNESCO estimated that by the end of March 2017, factoring in staff costs, the STEM project would have disbursed USD 1.8 million of the total USD 2.5 million in funding. This was predicted to leave an unspent balance of USD 700,000. UNESCO has requested a no-cost extension until 31 December 2017 to allow for full utilisation of these funds, targeting improved ICT infrastructure in ECs, including internet access, an e-portal, and essential ICT equipment. In March 2017, Australia approved this request.

STEM Phase Two¹⁵ (2017-2019) started in January 2017 and builds on the groundwork from STEM Phase One. Phase Two will expand on activities under the three key outputs of STEM Phase One and also add a fourth output related to human rights, equity and promotion of gender equality.

¹⁴The Ministry of Education had experienced a restructure under the previous government that had similar resourcing and policy implications.

¹⁵Receiving funds from Government of Finland.

3. Findings

This section presents the findings against the review criteria (Relevance, Efficiency, Effectiveness, Impact, Social Inclusion and Gender Equality) and questions in sections 3.1 to 3.4. Recommendations based on these findings are presented in Section 3.5.

3.1. Relevance

In this review, the relevance criteria relates specifically to the relevance of the STEM products to MoE priorities and to the program's responsiveness to MoE. This question does not look at how the program and its products meet the needs of Myanmar as this is discussed in section 3.4.

Overall Relevance Finding - The review has found the program focuses on outputs which are fundamental to the education sector and have the potential to influence the reform agenda¹⁶. The Teacher Competency Standards Framework (TCSF) for example will influence the focus of pre and in-service teaching in Myanmar and donor investments in the education sector.

Specifically the review has found that:

1. The program aligns well to the MoE's priorities.
2. The program has been very responsive to the MoE and to DFAT.
3. The program could be further integrated into the education sector.

Relevance Finding 1 - The program is well aligned to government priorities

The program products align well to the government's priorities for the education sector. The program delivers four key products:

- The TCSF;
- A four year teacher education curriculum for basic and middle school teachers;
- Improvements to the management of ECs;
- Support to ECs to increase their ICT capacity. This includes the development and roll out of an ICT course in all ECs, two to three ICT tutors per EC, ongoing capacity building of ICT tutors through training, the installation of internet infrastructure in all ECs and the development of an e-portal.

Significantly, the TCSF and the four-year teacher education curriculum align directly with government priorities. The NESP and the State Counsellor (in a recent speech given in August 2016) both identify teachers as key enablers in improving the education outcomes in Myanmar. The NESP specifically points to the need for a TCF and a four-year teacher education curriculum. Furthermore, the majority of the stakeholders consulted identified the four-year curriculum as one of the MoE's priorities.

¹⁶ The TCSF constitutes a potential trigger for reform of current education legislation and policy as it was developed prior to Myanmar having a TCSF.

Some education representatives, including MoE advisors, donors and others, suggested that the program and MoE will need to manage for a number of likely challenges when planning the roll out of the four-year curriculum including:

- Transitioning to the four-year curriculum will greatly impact the sector’s ability to produce sufficient quality teachers as the structural and resourcing changes are made to the current system (mainly ECs).
- Existing and newly qualified teachers (predominantly women) completing the two-year curriculum course may be disadvantaged, as they may be perceived to be less well qualified.
- Lastly, while aligned with MoE sector policy, there is scope for the STEM documents to better reflect the gender equality and social inclusion content of the National Education Law and NESP (discussed further in Section 3.5).

Relevance Finding 2 – The program has been responsive to MoE and DFAT

The program has engaged well across parts of MoE and has been responsive to the MoE, in particular to the Minister and DHE (DTET). The program has a highly participatory approach. It consults across MoE and the education sector (donors and multilateral organisations) at all stages of the program.

The program, across its three areas of work engaged with the following government education stakeholders: the Minister, DHE (DTET), DBE, DERPT¹⁷ and NEPC. The following university or educational providers were also engaged: YUOE, SUOE and Alternative Education. Significantly, DTET was seen to be most engaged and the NEPC and Alternative Education were engaged only recently.

The program products as a result have been significantly informed and reviewed by MoE and education sector representatives. The program products are listed in the table below against the three program work areas.

Table 1. STEM program products

Program Area	Products
Review of upgrading of EC management and use of ICT solutions in EC	Management of ECs in Myanmar: Review Report (November 2016), Concept note on ICT equipment needed in ECs (February 2017), Teacher educator guide to accompany current DTEd textbooks year 1 & 2 (March 2017).
TCSF	TCSF DRAFT 2.0 Proposed Approach (Feb 2017)
Curriculum Review and development	Education College Curriculum Framework for 4-Year Degree (2016), Need Assessment for Capacity development plan for teachers (May 2016), Master Plan ¹⁸ : Costing of Options for Upgrading Education Colleges to 4-Year Degree Awarding Institutions (February 2017),

¹⁷ Prior to institutional restructures STEM engaged with Department of Teacher Education (DTE), Department of Human Resources and Educational Planning (DHREP) and Department Myanmar Education Research (DMER).

¹⁸ As referred to by informants.

While the key products were designed by a core of Technical Advisors (TA), the process of validation and consultation was participatory. The program engaged with relevant MoE and education sector stakeholders at each stage of the program. This included socializing the program through introductory meetings and monthly updates, gathering information to inform the program using participatory methods and using working groups to review and inform the development of the TCSF and four-year curriculum. Program products were also tested in the field and went through successive reviews from a number of key stakeholders. As a result STEM is well known and appreciated by consulted stakeholders. The legitimacy of the STEM has led to UNESCO's involvement in the development of the Master Plan for Pre-Service Teacher Education with a particular focus on the approach for implementing the four-year curriculum across all ECs.

It should be noted that the current structure of the MoE means that DHE (DTET) is the natural home for STEM. This results in the program being less well connected to other education departments. In particular, the program could be better connected to the DBE. This is a significant gap as DBE employs teachers in the public education system (80% of the education sector). Teachers are a key user of the teacher education curriculum and the TCSF. As a result, it is anticipated that these products will be less useful and accessible to teachers. These challenges may become apparent during implementation as teachers are pushed to use the new curriculum and TCSF. Likely issues include difficulties in understanding the language in these products, in transitioning from current to new practices, and difficulties around a lack of knowledge in skills required in using the products.

DFAT is a key donor in the education sector in Myanmar and has been the co-chair of the donor coordination meetings. DFAT was closely involved in the conception of the QBEP and subsequently STEM. Since the program's inception the STEM program manager has kept DFAT updated through regular meetings. The program manager and team have been responsive to DFAT throughout the life of the program.

Relevance Finding 3 – The program could be further integrated into the education sector

The program responds well to individuals within the MoE but is less able to contribute to broader responses at a system level as it does not have a mechanism with which to engage the whole sector. STEM was conceptualized with a Steering Committee (SC) whose members would come from across MoE (Executive level) and DFAT to provide guidance to the program at a whole of program level. The SC was never established though there are plans to rectify this in STEM 2.

When the review was conducted it was unclear how the program's products and efforts leverage other efforts in the sector. A number of interviewees, particularly other deliverers (multilateral organisations, consultants and MoE departments including DBE) tended to know little of the program. We suggest that the lack of a SC has limited the opportunities for dialogue at the system level. For example, the program has strong relationships with DHE and much less with DBE, despite the fact that many of the users of the program products and in particular the TCSF are employed by DBE.

3.2. Efficiency

This review looked at the following aspects to respond to the efficiency question. Specifically, the review looked at whether the program was delivered as planned (budgets, activities and timelines); the adequacy of the program's resourcing in terms of expertise (within the team and

within UNESCO's network and the program partnerships) and the approach to program planning and implementation.

Overall Efficiency Finding – The review has found that the program is delivered by a suitably resourced team which despite being made up of team members with appropriate skills, knowledge and experience is not sufficiently effective. The understanding across MoE and donors of the program is limited, the program lacks cohesion with apparently limited alignment and leveraging between the program streams and the program not positioning for potential appropriate system wide change.

Specifically the review found that:

1. **The program operates in a challenging context.**
2. **The program management and team have good expertise well suited to the program and could further draw on complimentary partnerships and networks.**

Efficiency Finding 1 – The program operates in a challenging context

The program's implementation has experienced a number of understandable and justifiable delays in delivering the project within planned activities, timelines and budget. The program has had difficulty in disbursing its available budget as planned. The program's original budget was USD 2.5 million between July 2014 and December 2015. To date the program has disbursed USD1.8 million of its original budget and DFAT has granted two no cost extensions to March 2017 and now to December 2017.

Factors that contributed to delays in program implementation were due to:

- **The substantial amount of engagement required with MoE as the Ministry and its departments transitioned to the new government.** In the first months of the program the key departmental contacts for the program changed three times. This meant that in the first part of the program implementation the program team had to re-engage with the incoming leadership as if the program was just starting and had to wait for MoE's new governance structures to become operational, leading to delays in starting the program activities in earnest.
- **The program struggled to find and recruit** local and international team members and consultants in a timely manner. It was proposed that conditions for recruiting in Myanmar were not optimal at the time.
- **The facilitated approach adopted** by the program to enable stakeholder (Working Group members and others) input into and review of the program outputs has taken more time than anticipated. This approach has been deliberately adopted to build capacity, encourage ownership and to tailor program outputs to the Myanmar context.
- Some of **the program activities had ambitious timelines** given the expected outputs and the facilitated approach. For example, the timeline of one month to develop and deliver a pilot ICT course for ECs.

The changing political context and staffing within departments has meant that the program has had to be reactive to a certain degree to accommodate MoE's ambitious pace for reform. This is a strength of the program which has assisted in developing a good working relationship with the MoE and MoE's ownership of program outputs.

Efficiency Finding 2 - The program requires a diverse range of expertise

The program requires technically diverse inputs from professionals with expertise in teacher competencies, curriculum for teacher education, ICT training for teachers and college management and skills in integrating gender equality and inclusive education approaches. In addition, the program needs to be responsive to MoE requests for information. Furthermore, the context in which the program is delivered is challenging and the program team needs the skills to operate in this environment. Myanmar is a new democracy, its teacher education infrastructure and systems are eroded, and it has unique cultural and social settings.

The program team have excellent local expertise of the education sector, especially ECs, significant experience of working with MoE and international actors, in depth historical knowledge of the program (one team member has been involved with the program since its inception) and a program manager with a doctorate in education. To complement this team, the program contracts independent consultants to deliver pieces of analytical work, develop the ICT training, the TCSF and the four-year curriculum.

3.3. Gender equality and social inclusion

One of the questions for the review was whether ‘cross-cutting and related issues particularly gender equality, inclusiveness (disability and other social characteristics), and child protection had been adequately addressed in key documents.’ To this was added ‘ethno-linguistic diversity’, a characteristic pertinent to the Myanmar context and covered indirectly under DFAT policy⁴⁹. The desk review was a two-step process: 1) review of the extent of inclusion concepts in Myanmar education policy; and 2) the inclusiveness of the core STEM documents. This component was undertaken as a desk review only.

Overall Gender Equality and Social Inclusion Findings – The review has found that the program products do not adequately reflect gender equality and social inclusion principles. The program products do not align to the social inclusion guidance already included in Myanmar’s existing education policies. The guidance in these policies is limited to some aspects of social inclusion and does not go far enough in considering gender equality, ethnic linguistic diversity and disability inclusion.

Specifically the review found that:

1. Myanmar Government educational policies make reference to gender equality and social inclusion.
2. The core program documents have scope to increase the emphasis on gender equality and social inclusion.

Gender Equality and Social Inclusion Finding 1 – The Myanmar education policies include references to gender equality and social inclusion

The review of Myanmar’s *National Education Law* (2014) and the *NESP* found that these documents endorse ethnicity-related inclusion and progressive recognition of disability inclusion within the Myanmar education sector.

⁴⁹DFAT Indigenous Peoples Strategy 2015-19.

Ethno-linguistic diversity: The National Education Law states that Myanmar’s Ministry of Education shall ‘produce teachers who value the languages, culture and traditions of all ethnic groups in the nation’. It also provides for ethnic languages to be used in instruction at basic education level²⁰. The NESP recognises that the language barrier is a major reason for school ‘drop out’.

Disability inclusion: The Law provides for the establishment of separate schools and special education programs for children with disabilities, so that every child can realise their right to education. This is in contrast with Australia’s ‘twin-track’ approach and support for inclusive education whereby children living with disability have access to mainstream education as well. However, the NESP proposes that “efforts will be made to promote a transition from special needs schools to mainstream schools” (i.e. support for inclusive education). The NESP cites analysis from the Myanmar Disability Survey (2010), “that almost half of people with a disability have never attended school”, and reiterates this in the ECCD and basic education chapters. Relevant to STEM, the NESP recognises, “the lack of pedagogical support (learning materials and teaching specialists)” as a barrier for children with disabilities²¹. It foreshadows the “roll-out of a general training module on inclusive education (including for children with disabilities) for education colleges and in-service teacher training programmes”²².

These documents also have some qualified reference to gender equality, while child protection is not mentioned.

Gender equality: There is no mention of gender issues, or of attention to any teaching or learning differences between boys or girls, men or women, in the Law. The NESP mentions gender issues, but these references are qualified and tentative. For example, the NESP states that, “gender dynamics may mean that access, inclusion and quality issues are different for boys and girls,” but the lack of Myanmar-specific data means that it is not clear whether this is the case²³. Relevant to STEM, the NESP does note that there is an urgent priority for existing teachers to be trained to use the new materials and curriculum, to better address issues relating to gender and inclusion²⁴.

Child Protection: There is no mention of children’s safety and protection in the Law or in the NESP.

Gender Equality and Social Inclusion Finding 2 – The program documents insufficiently address gender equality and social inclusion

The overall findings from the review of the four core STEM documents are outlined in this section.

It is clear that the documents enable the introduction of international standards and practice into Myanmar. However, the documents read as generic and perhaps abstracted from the Myanmar context. The context of the relative status, remuneration and profile of current teachers across Myanmar (mostly underqualified women with variation in skill between locations) is absent. This detail would clarify the means or resources, incentives and barriers to skills upgrading for this

²⁰ Chapter 5: System of National Education, Article 20 (c); Chapter 7: Establishment of Curriculum and Curriculum Standards, Article 44 (b).

²¹ Ibid. p.49

²² Ibid. p.105

²³ Ibid. p.101

²⁴ Ibid. p.148

group, and for the reform of education colleges. It would also test the feasibility of certain delivery platforms such as distance learning for teachers in rural locations.

The documents do not convey the ethnic diversity of Myanmar and the fact that teachers will likely need competencies in multi-lingual, multi-cultural classroom management. Foreseeably, teachers also have the potential to promote and model respectful regard for all ethnic groups and their cultures, and contribute in a proportionate way to peace.

With the location of ECs in conflict-affected states and with a qualified teaching workforce needed for those states, more emphasis could be placed on competencies for supporting children from these areas. There may be good reason for not including these issues in the 4-Year Curriculum and Teacher Competency Standards Frameworks, but they are arguably issues that teachers will need the skills to face.

There is no mention of the profile of the teaching profession itself (gender, ethnic background, living with disability). Presumably, teachers in remote areas will be drawn from that region. These documents are an opportunity to promote equal opportunity and a workforce that reflects the diversity of the country.

There is no mention of teacher competencies with respect to girls and boys living with disabilities. In addition to the special education policy, there may be students with impairments enrolled in mainstream schools. This is an opportunity to incorporate reference to teacher competencies in supporting diverse learners, and adapting materials (e.g. printing documents in large font size) and classroom set up so that it supports educational access for all. Also role-modelling positive attitudes and behaviours towards people with disability would be relevant, irrespective of whether students with disabilities are enrolled.

Women are well-represented in certain fields within tertiary education. Whilst women comprise the majority of teaching workforce, they are a minority in leadership roles in school management and Township Education offices. Women also have less financial autonomy, collateral, ownership and control of IT as well as mobility in society generally. This may mean that as the management of education colleges is reformed and teaching is professionalised, that women may lose out on being promoted.

Some women may also face challenges in undertaking night time, off-site or online modules, and so the predominant teaching workforce should be consulted on models of delivery that are feasible for them. Teachers also have the potential to play a key role in promoting positive gender relations and dispelling gender stereotypes about boys' and girls' prospects. This could be better highlighted in the 4-Year Curriculum and TCSSF. The sex-disaggregated data in the report on the Management of Education Colleges in Myanmar is very useful as a baseline on women and men's access to leadership.

There is no information on the costs or government subsidisation of the reforms proposed. It would be useful to know the cost of a 4-year degree, relative to current minimum teaching wage, to understand the prospects for the current teacher cohort (young, limited training, low wage) to upgrade their skills. It would also be useful to understand the access to resources such as teaching aides, materials and IT that teachers will have.

3.4. Effectiveness and Impact

In this review, the effectiveness question related to the quality and extent of stakeholder engagement and involvement and the resulting impacts of the program.

Overall Effectiveness and Impact Finding – The review found that the program had positive impacts on those involved in its participatory processes and identified some considerations for the transferability and implement-ability of the program products in the current Myanmar context.

Specifically the review found that:

1. The program has been effective in producing the planned outputs and as a result has exposed participants to new ways of thinking and working in teacher training.
2. The program lacks integration across the education sector stakeholders including both MoE and donors.
3. The program could take into consideration the readiness of the education sector to implement the program products.

Effectiveness and Impact Finding 1 – The program has produced its planned outputs and exposed individuals involved in the program to new ways of thinking

The program has been effective in producing the planned outputs and through this process has successfully exposed those involved to new ways of thinking and working in teacher training. The program has made a significant difference in Myanmar. Before STEM there was limited ICT training²⁵ for ICT teacher trainers (indeed, there were no ICT teacher trainers or computers for student teachers to use). Other initiatives have also brought benefits. For example, through participation in the curriculum development project one teacher reported a better understanding of how to use reflection in her practice.

As a result of the TCSF workshops, participants have reported a good understanding of the potential for using the TCSF. MoE is considering the ways in which the TCSF can contribute to an improved teacher promotion system, teacher career regime and teacher performance assessment system. Donors and multilaterals are waiting for the latest version of the TCSF to align with various aspects of their programs.

Effectiveness and Impact Finding 2 – The program lacks integration across the education sector stakeholders including both MoE and donors

The program has been effective in reaching key audiences including the Minister, key MoE departments such as DHE and the ECs. The program has been less effective in reaching other important stakeholders in the education sector. This includes those stakeholders involved in the implementation and use of the teacher education outputs and also donors and multilateral agencies working in the education sector.

For the key outputs - the TCSF and the four-year curriculum - the program has adopted facilitated approaches which have served it well in reaching²⁶ and raising awareness amongst MoE stakeholders (as noted above in the section on relevance). The program has also made concerted

²⁵ A postgraduate Diploma in Multi-media and Arts administered by the Universities of Education supplemented this skill development.

²⁶ By reach or reaching is meant those that know of and/or are involved in some capacity in the program.

efforts to share its outputs with relevant stakeholders in MoE and the international community. MoE, through the DHE DDG was involved in the ASEAN regional forum in early 2017 on teacher competencies where the TCSF was presented to other ASEAN Member states education sector representatives.

Despite these efforts this review has found that:

- **the reach of the program into MoE is limited to developers** (DHE, DTET and universities) rather than implementers and users with limited representation from DBE and ECs. The program's engagement with non-Myanmar implementers such as the WB was also limited.
- **the 4-year curriculum and the TCSF were the most well-known program outputs;** a very small number spoke of the ICT component unprompted (mostly ECs and donors) and even less of the administrative and management component.

Furthermore, donors and MoE representatives recognized the clear synergies between the STEM program and other donor funded programs (past, current and planned). The program is relevant to a number of donor investments delivered by JICA, WB, BC, UNICEF and ADB. For example, the WB's mentoring program involves assessment of teachers against competency standards and related indicators, the ADB and JICA's curriculum work for primary school teachers and the British Council's training of teachers in the methodology of teaching and its plans to support the implementation of the curriculum. The program team have had limited engagement with UNICEF, WB (who developed their competencies while waiting for the TCSF) and slightly more engagement with others (BC, JICA).

Effectiveness and Impact Finding 3 - The program's outputs' implement-ability is in question

The program chose TA-led²⁷ facilitated participatory approaches to develop its outputs. This was effective in engaging different stakeholders in the process, ensuring the transfer of knowledge between the program and participating stakeholders and developing ownership of the outputs.

Feedback from consultations and the review of program documents identified a few considerations for the program going forward in regards to the implementation of the program products. Using the four-year curriculum as an example, it was thought that the implementation of the curriculum would face the following challenges:

- The curriculum adopts an integrated approach to learning by student teachers where content and process of teaching are not separated. This will require a change of the way ECs are currently organised into departments with separate departments for teaching the subject content and the methodology of teaching the subject. These two aspects of teacher competency are not integrated at the EC level.
- The curriculum adopts a constructivist approach where the teacher educator provides a framework within which the student teachers can discover and construct their own knowledge of how and what to teach. This is a radical change from the current way in which teachers conduct sessions.
- Until recently the ECs were administered under the Department of Education Research, Planning and Training (DERPT) but will now be administered under the DHE with the Universities. Currently the Universities are the only institutions that can offer a degree;

²⁷ Technical Assistance provided by an individual or organisation.

unless ECs are affiliated with a university they are unlikely to be able to offer four-year degrees in the future.

Lastly, through the consultations, the review team was made aware of two previous attempts to introduce a TCF in Myanmar. In 2005 the University of York drafted a TCF for alternative schools and in 2005 - 2007 another TCF with four categories teachers, teacher educators, head teachers and education managers was drafted but was never implemented due to a lack of government direction (no legislative framework) and support.

3.5. Recommendations

Key recommendations for the program are presented in the table below. The recommendations are focused on improvements for STEM which are applicable to both STEM 1 and STEM 2. The recommendations are supported by a rationale and linked to findings in the report. It should be noted that these recommendations were developed at the whole of program level rather than against each key evaluation question. This is deliberate and enables the recommendations to be meaningful across the program and to steer away from a long list of very specific and detailed recommendations which are less likely to achieve a significant positive impact on the program.

Table 2. Recommendations

Recommendation	Rationale	Link to the findings which point to a need for improvement
<p>1- That the program establish and leverage a high level Steering Committee to better enable systemic change through the program, strategic positioning of the program and influence for the program.</p>	<ul style="list-style-type: none"> • The program would benefit from better oversight and strategic direction. • This is because the program 1) does not have a SC with high level membership across MoE, Donors and other strategic actors • As a result, 1) the program only reaches parts of MoE and critically relevant MoE departments such as DBE are less aware of the program and its outputs. 2) Other relevant and interdependent donor funded programs such as the WB's Mentoring program are also less aware of the program's outputs. 3) The program misses out on opportunities for broader systemic changes. • There is an opportunity to rectify this as the program has demonstrated a high level of responsiveness to both donors and MoE and clear opportunities for alignment and complementarity with other education sector donor and MoE investments and programs. 	<ul style="list-style-type: none"> • Relevance Finding 2 - The program could be better connected to key departments such as DBE - employs teachers (key user of STEM products) in the public education system (80% of the education sector). • Relevance Finding 3 - STEM was designed with a SC with members from across MoE (Executive level) and Donors to provide high level guidance but the SC was never established. • Relevance Finding 3 - The lack of a SC has meant that the program has not maximised opportunities for dialogue at the system level and as a result its impact has been limited to some parts of MoE • Efficiency Finding 1 – A responsive program – which responds to MoE requests. • Effectiveness Finding 2 - donors and MoE representatives recognized the clear synergies between the STEM program and some other donor funded programs, The program could be better known by UNICEF, WB (who developed their competencies while waiting for the TCSF) and engage to a degree with others (BC, JICA).
<p>2 - That the programs revise the core STEM documents to give greater emphasis to gender equality, ethnic linguistic diversity and disability inclusion. At a</p>	<ul style="list-style-type: none"> • The program products could better meet gender equality and social inclusion expectations • As a result 1) the products appear to be generic and abstracted from the Myanmar context, 2) the products do not outline the required 	<ul style="list-style-type: none"> • Gender Equality and Social Inclusion Finding 2 - The documents read as generic and perhaps abstracted from the Myanmar context. The context of the relative status, remuneration and profile of current teachers across Myanmar

Recommendation	Rationale	Link to the findings which point to a need for improvement
<p>minimum, the STEM core documents could reflect the inclusion language in the <i>National Education Law</i> and <i>National Education Strategic Plan</i>. The program may also identify opportunities where it is possible to reach further than these policies in the core STEM documents, to support teacher competencies that truly realise access for all children.</p>	<p>competencies of implementers to deliver across Myanmar 3) the program does not consider the different impacts of the program products on women and men.</p> <ul style="list-style-type: none"> • There is an opportunity to leverage Myanmar’s existing policies to review the program products’ social inclusion aspects in light of these. 	<p>(mostly women, underqualified, variation in skill between locations) is absent</p> <ul style="list-style-type: none"> • Gender Equality and Social Inclusion Finding 2 - The documents do not convey ethnic diversity of Myanmar, and the fact that teachers will likely need competencies in multi-lingual, multi-cultural classroom management • Gender Equality and Social Inclusion Finding 2 - There is no mention of the profile of the teaching profession itself (sex, ethnic background, living with disability). • Gender Equality and Social Inclusion Finding 2 - There is no mention of teacher competencies with respect to girls and boys living with disabilities. In addition to the special education policy, there may be students with impairments enrolled in mainstream schools.
<p>3 - That the program leverage its existing relationships with UNESCO’s extensive expert educational network and other expertise (such as the WB, British Council etc.) to access the most pertinent, relevant and leading technical advice for the program, especially when it comes to developing foundational pieces of work such as the TCSF.</p>	<ul style="list-style-type: none"> • Program products, both individually and as a whole, could be enhanced with regard to technical quality and fit to the Myanmar context • This is because the program has struggled to access appropriate technical advice and support and to engage across MoE • As a result the program’s products were developed with some of the key stakeholders, and with available TA. Some stakeholders have raised concerns about the implement-ability of the products. • There is an opportunity to remedy this by engaging with relevant stakeholders in MoE and leveraging UNESCO’s significant network of education specialists with expertise in similar contexts. 	<ul style="list-style-type: none"> • Relevance Finding 1 – Consulted informants suggested that further exploration of converting to a four-year curriculum for ECs might have been explored. • Relevance Finding 3 - STEM was conceptualized with a SC with members from across MoE (Executive level) and donors to provide high level guidance but the SC was never established and DFAT’s oversight of the program has been limited to staying informed on program progress. • Efficiency Finding 2 - The program has had difficulty in accessing appropriate expertise in a timely fashion. • Effectiveness Finding 3 - Weaknesses in the processes and outputs include the lack of focus on the implement-ability of the outputs such as the four year curriculum (translating into Myanmar, technical documents developed in English, adopting an integrated approach and constructivist approach are both very new to Myanmar and the challenges posed by the current administration of the education sector). The process relied mostly on a few MoE representatives from just some MoE departments (mostly developers) to comment on the content of the outputs when they had very little exposure to TCFs and current good practice in pre-service curriculum development.

4. UNESCO Management Response

In this Section, UNESCO provides its response and further clarification to some of the points raised across the Findings section as well as the Recommendations. UNESCO notes that most recommendations have already been met by work conducted under Phase II of the STEM project, which commenced in January 2017.

4.1. Findings

Relevance

The overall finding against the criteria for relevance concludes that the program is well-aligned to government priorities, but that the program can be further integrated into the education sector. Some concerns in regard to challenges with the implementation of the upgrade of Education Colleges (ECs) to a 4-year degree are noted, based on interviews conducted for the evaluation. The evaluators also note that the documents produced under STEM could better reflect gender equality and social inclusion content.

Relevance finding 1: The program is well-aligned to government priorities

The program is aligned to government priorities as the STEM project's design and purpose responds to the priorities for teacher (education) reform as identified by the Comprehensive Education Sector Review (CESR) process (2012-2015) undertaken by the Myanmar Government, and the Government's subsequent formulation of the National Education Strategic Plan (NESP) 2016-2021. The STEM project's outcomes and outputs are directly aligned with NESP Strategy 1 on Quality Assurance and Management (S1C1, S1C2, S1C3) and NESP Strategy 2 on Pre-Service Teacher Education Quality Improvement (S2C2) under Chapter 9 on teachers.

UNESCO fully recognizes the challenges of implementing Myanmar's teacher education reform as outlined in the NESP, in particular the concerns raised by interviewees during this evaluation:

1. Transition to the 4-year curriculum will impact the sector's ability to produce sufficient quality teachers as the structural and resourcing changes are made to the current system;
2. Graduates from the current 2-year curriculum, pre-dominantly women, may be disadvantaged.

Similar challenges exist for any country trying to undertake major reform of its teacher education system. The challenges can be addressed by careful planning, both for the immediate and long term, for rolling out the reform, including how the existing work force will be given opportunities to upgrade themselves with particular focus on gender responsive approaches.

Anticipating these challenges, the design of the STEM project includes three main outcomes/ areas of work in order to support the successful implementation of the reform: 1) development of teacher policies, 2) development of a new curriculum and capacity building of Teacher Educators, and 3) support to more efficient management of ECs, including investment in ICT. For the STEM Phase II, a specific outcome area on gender equality, equity, human rights, and peace education has been added to ensure mainstreaming across all activities of these components.

Under Outcome area 3 on EC management, specific activities are currently ongoing to support the Ministry of Education (MoE) on the process needed to develop a Master Plan for the upgrade of the ECs. A first step is to develop, with available data, an overview of demand and supply for the number of teachers each EC needs to produce. In this regard, a first workshop will take place in late October 2017, supported by UNESCO's International Institute for Educational Planning (IIEP), to work with MoE officials across the Department of Higher Education (DHE), the Department of Basic Education (DBE), and the Department of Educational Research, Planning and Training (DERPT) to establish a simulation model for calculation of teacher needs with multi-year projections. This will provide a foundation for MoE to plan and cost the needed upgrade of infrastructure and increase in staff, in order to determine the speed of implementation of the reform. Using disaggregated data by gender and ethnicity can also assist MoE in its strategic planning for training and matching teachers with specific competencies required to better meet students' language needs.

Under Outcome area 2 on development of a new curriculum, work is ongoing to develop an online platform for ECs to be able to provide alternative delivery modes of the new curriculum through distance education. Developing different pathways for training of both new and existing teachers will be important for mitigating the above challenges and requires MoE to develop a long term plan for teachers' career development opportunities. In this regard, under Outcome area 1 on development of teacher policies, the STEM project is supporting MoE to start the process of developing a comprehensive teacher policy including rules and procedures for recruitment, training, standards, deployment, promotion/career paths, working conditions and management.

UNESCO welcomes the emphasis of the evaluation on the issues of gender equality and social inclusion. Work is taking place under Phase II of the project in relation to these equity issues, as outlined below in response to the specific section on this evaluation criteria.

Relevance finding 2: The programme has been responsive to MoE and DFAT

The evaluators state that while the program is responsive to both MoE and the donor, it does not seem to be well connected to the Department of Basic Education (DBE), and therefore express concern that the STEM products will be less useful and accessible to teachers.

UNESCO would welcome a more active role of DBE in the teacher education reform process and related activities. However, it should be noted that as per the MoE's structure, the responsibility of pre-service teacher education is assigned to the DHE, which then naturally serves as the main focal point for implementation of STEM project activities. It should be acknowledged that MoE, through DHE, has throughout the period of the STEM project actively assigned representatives from DBE and DERPT to all STEM activities. In the STEM Steering Committee recently established, the MoE has appointed representatives from DHE, DBE, DERPT, the National Education Policy Commission (NEPC), and the National Curriculum Committee (NCC) which will strengthen the coordination on details of project activities. STEM activities are also reported through the newly established Teacher Education Sub-Sector Working Group (SSWG), under the Education Technical and Vocational Sector Coordination Group (ETVSCG), where all MOE departments are represented.

In regard to whether the STEM products/documents are useful and accessible to teachers, the different nature and purpose of each product needs to be considered. Some of the documents produced under the STEM project are assessment reports of the current situation and serves the purpose of providing MoE with baselines for planning an appropriate approach to reform

activities. Examples of such reports are the review of the current EC curriculum, a capacity assessment report of EC Teacher Educators, and a review of the effectiveness of the current management of ECs.

Other documents are policy documents, such as the Teacher Competency Standards Framework (TCSF) and the new EC Curriculum Framework. These are frameworks used by the MoE to provide overall guidance to the teacher sector. The TCSF provides a national framework that is, for example, used to guide the development of the new competency-based curriculum. For direct use by teachers at different levels of education, it is advised that specific tools be developed for each intended purpose. It should also be noted that the TCSF will still need to undergo an MoE-identified process of review by NEPC, further revision, national consultation, validation, and finally development of specific tools for different users and purposes. How it will be used, as planned through development of a teacher certification system, is an important area of policy decision-making to be undertaken by MoE. The STEM project is providing continued technical assistance to this process together with other relevant development partners. Similarly, the Curriculum Framework is a policy document not intended for direct use by teachers, but for the MoE and curriculum developers to develop subject syllabi, textbooks, and teacher guides for ECs.

The evaluators also expressed concern about the documents not being accessible as they were developed in English language. UNESCO would like to clarify that all reports have been translated into Myanmar language and made available to relevant parties, including the TCSF and the Curriculum Framework. However, UNESCO recognises that through experience of the early period of the STEM project, together with national experts, we have confirmed the difficulty of translating highly academic text from English to Myanmar language. Therefore, in ongoing activities the use of Myanmar for initial drafting is encouraged where possible, with subsequent translation into English.

Relevance finding 3: The program could be further integrated into the education sector

The evaluators concluded that the program, while responding well to individual officials in MoE, is less able to contribute to broader responses at system level as it under Phase I did not have a Steering Committee.

As the STEM project responds to the NESP priorities, the MoE is coordinating its reform efforts mainly through the Teacher Education Sub-Sector Working Group, where UNESCO STEM staff are actively participating. A STEM Steering Committee has been established under Phase II of the project. A Steering Committee was not established under Phase I, as MoE was consumed with CESR efforts during that period and the significant coordination mechanisms required. When STEM governance was discussed with each subsequent Union Minister of Education, they preferred to appoint a focal person (or small team) within the MoE to provide guidance for the project as a whole and for more technical areas such as the development of the TCSF. This decision might also have been due to the overwhelming number of other committees being established. Instead, frequent meetings were held with the Union Minister of Education, particularly in the early days of implementation, in addition to the line department.

UNESCO would like to highlight the significant investment of effort and time towards effective coordination with other development partners, such as STEM staff participating in the Education Development Partner Coordination Group (EDPCG), the Myanmar Teacher Education Working Group (MTEWG), and an informal group on teacher education working with ECs convening UNICEF, JICA, British Council, ADB, and UNESCO. On various occasions, UNESCO presented its work, for example on the TCSF, to these groups and DPs, including at a World Bank event.

Efficiency

The overall finding against the criteria for efficiency concludes that a suitably resourced and skilled team is in place, but that the implementation of work is not sufficiently effective.

Efficiency finding 1: The program operates in a challenging context

While the main evaluation analysis recognises the valid reasons for constraints to progress implementation, including the transition to a new Government, UNESCO would like to highlight the importance of STEM project activities being led by MoE through consultative processes supporting the Government's reform efforts, rather than being pushed through as an external, stand-alone project. This is particularly important for the development of the TCSF, where UNESCO is supporting a MoE-appointed Working Group to undertake the drafting.

UNESCO would like to provide clarification to the claim that only one month was provided to "develop and deliver a pilot ICT course for ECs" (p. 19). We believe this refers to a short-term contract with a senior ICT in Education expert to compile some basic ICT literacy resources and to do a short Concept Note for training. These materials were prepared for consultation with all the EC ICT Tutors for further revision and incorporated into an interim supplementary teacher's guide to support the current EC ICT textbooks, a process conducted over a whole year.

Efficiency finding 2: The program requires a diverse range of expertise

The evaluation concludes that the program management and team have good expertise suited to the program, but that the program can draw on complimentary partnerships and networks.

UNESCO adds that local UNESCO staff in Yangon are supported by staff at the UNESCO Regional Office in Bangkok as well as at Headquarters in Paris. In addition, under STEM Phase II, which is moving more into implementation of activities planned under Phase I, UNESCO is working closely with technical staff at the UNESCO International Bureau of Education (IBE) in Geneva, the UNESCO International Institute for Educational Planning (IIEP), and the Global Teacher Task Force in Paris.

Gender equality and social inclusion

The overall finding against the criteria for gender equality and social inclusion found that the core STEM program products have scope to increase the emphasis on these equity issues.

UNESCO welcomes the emphasis of the evaluation on the issues of gender equality and social inclusion. In Phase II of the STEM project, supported by the Government of Finland, a specific outcome area 4 on gender equality, equity, human rights, and peace education was added to raise the profile for these components and to ensure mainstreaming across all activities. UNESCO would like to note progress of work already taking place, such as the MoE-appointed Working Group for the UNESCO regional initiative on gender equality in teacher education, the "Enhancing girls' and women's right to quality education through gender sensitive policy making, teacher development and pedagogy in South, Southeast and Central Asia". This regional initiative which, launched in 2016, has five components of which the first component of conducting an assessment of gender equality in teacher education has just been completed.

Furthermore, activities have started to mainstream existing resources on inclusive education issues into the training of the Curriculum Core Team for development of the new EC curriculum. For example, UNESCO has already developed teacher training material for the Myanmar context

on peace education and education for sustainable development. This latter point was discussed in the STEM Steering Committee meeting in September 2017 with the Union Ministry of Education as a continued priority.

UNESCO in particular welcomes the specific suggestions to strengthen equity issues throughout the STEM documents, which can provide guidance to strategic discussions within the STEM Steering Committee as well as the different MoE-appointed Working Groups.

Regarding the comment on costing of the reforms, UNESCO recognizes the importance of this and highlights the work on costing of the NESP, including teacher education, supported by UNESCO. In addition, as mentioned above, the STEM project is specifically undertaking activities under Phase II of the project to assist MoE in establishing a simulation model for calculating teacher needs and costing of reform options for upgrade of the ECs.

Effectiveness and impact

The overall finding against the criteria of effectiveness and impact concluded that the program has had positive impacts on those involved in its participatory processes, but raises concern about the readiness of the education sector to implement the program products.

Effectiveness and impact finding 2: The program lacks integration across the education sector stakeholders including both MoE and donors

As outlined above, the STEM project responds to the NESP priorities and the MoE is now coordinating efforts through the Teacher Education Sub-Sector Working Group (SSWG), where UNESCO STEM staff are actively participating. UNESCO has clarified above (p. 28) how different parts of MoE are engaged in STEM project activities, and welcomes increased engagement through the new mechanisms available such as the SSWG and the STEM Steering Committee.

UNESCO welcomes continued collaboration with all relevant development partners and would also like to highlight the significant investment of time towards effective coordination with other development partners, such as the Education Development Partner Coordination Group (EDPCG), the Myanmar Teacher Education Working Group (MTEWG), and an informal group on teacher education comprised of UNICEF, JICA, British Council, ADB, and UNESCO. UNESCO has consistently and regularly shared information on its work to other partners and presented policy frameworks including the TCSF at a World Bank event. Collaboration is a two-way process, which depends on all development partners having the interest and time to invest in meetings and attending joint events.

Effectiveness and impact finding 3: The program's outputs' implementability is in question

In terms of the implementability of the program products, UNESCO recognises the ambitious timeline of the reform. However, UNESCO would like to highlight that the STEM project responds to the reform as decided by the Myanmar Government in its National Education Strategic Plan (NESP) 2016-2021. The MOE reform agenda, as explained previously, is based on recommendations identified by national and international experts and national consultation during the Comprehensive Education Sector Review (CESR) process undertaken by the Myanmar Government (2012-2015). Efforts to support the MoE in the planning of the implementation of the reform have been mentioned above.

4.2. Recommendations

The UNESCO management responses to the three recommendations of the report draws on and summarizes the clarifications outlined above to each finding.

Recommendation 1: That the program establish and leverage a high level Steering Committee to better enable systemic change through the program, strategic positioning of the program and influence for the program.

UNESCO agrees with this recommendation. A STEM Steering Committee has recently been established under Phase II of the project. Above, UNESCO has provided explanation for why MoE previously decided not to establish such a Committee due to its overall burden of work.

Recommendation 2: That the program revise the core STEM documents to give greater emphasis to gender equality, ethnic linguistic diversity and disability inclusion. At a minimum, the STEM core documents could reflect the inclusion language in the National Education Law and National Education Strategic Plan. The program may also identify opportunities where it is possible to reach further than these policies in the core STEM documents, to support teacher competencies that truly realise access for all children.

UNESCO agrees with this recommendation. In Phase II of the STEM project, supported by the Government of Finland, a specific Outcome area 4 on gender equality, equity, human rights, and peace education has been added to ensure higher visibility of these key issues and to ensure mainstreaming across all activities. Work has already commenced on gender equality with a MoE-appointed Working Group actively participating in the regional initiative on gender equality in teacher education and through mainstreaming of cross-cutting issues in the EC curriculum development process. UNESCO will work with MoE to integrate the specific recommendation on review of the existing STEM documents.

Recommendation 3: That the program leverage its existing relationships with UNESCO's extensive expert educational network and other expertise (such as the WB, British Council etc.) to access the most pertinent, relevant and leading technical advice for the program, especially when it comes to developing foundational pieces of work such as the TCSF.

UNESCO agrees with this recommendation and highlights that substantial work that has taken and is taking place in this regard. UNESCO staff based in Yangon are supported by staff at the UNESCO Regional Office in Bangkok as well as at Headquarters in Paris. In addition, under STEM Phase II, which is moving more into implementation of planned activities under Phase I, UNESCO is working closely with technical staff at the UNESCO International Bureau of Education (IBE) in Geneva, the UNESCO International Institute for Educational Planning (IIEP), and the Global Teacher Task Force (TTF) in Paris. In relation to the curriculum development process and the training of Teacher Educators, the STEM project will draw on partnerships with international Universities for additional specific expertise.

It should be noted that throughout both Phase I and Phase II of the project, MoE has actively invited relevant DPs to participate in STEM workshops and activities. UNESCO would also like to highlight the significant investment of effort and time of STEM staff towards direct coordination with other development partners, such as the Education Development Partner Coordination Group (EDPCG), the Myanmar Teacher Education Working Group (MTEWG), and an informal group on teacher education working towards ECs convening UNICEF, JICA, British Council, ADB, and UNESCO. UNESCO has consistently and regularly shared and presented its work on STEM to

these groups and partners. UNESCO welcomes continued collaboration with all relevant development partners, noting that collaboration is a two-way process which depends on all development partners having the interest and time to invest in meetings and attending joint events.

5. Annexes

5.1. Evidence table

Table 3. Evidence table – results mapped and findings mapped to KEQs and focus

<u>Key evaluation questions (KEQs)</u>	<u>Finding and recommendation</u>	<u>Results</u>
<p>1. How relevant are the STEM products and activities to the Myanmar context?</p> <p>1.1. What are government priorities related to pre-service education? Have they changed since the start of the program?</p> <p>1.2. In what way does the program support those priorities?</p>	<ul style="list-style-type: none"> A key priority for MoE has been since the drafting of the NESP and continues to be a shift to a 4 year curriculum for teacher training. This highlighted a focus on improving the quality of newly graduated teachers in terms of knowledge of the topics, teacher methodology and maturity. It appears that the focus on a curriculum that is for 4 years in length has come from UNESCO's recommendation through its work. 	<p>Consultation – All consulted stakeholders had responses relevant to this question.</p> <ul style="list-style-type: none"> The new government was elected in March 2016, during the first 100 days of the government they were a lot of staff changes. A majority of respondents thought that the government priorities were the quality of teachers and the 4 year curriculum. Other priorities named included: the need for greater number of teachers (to fill the gap created by the introduction of the KG plus 12 years schooling and the shift to the 4 year teacher training curriculum), Linking pre and in-service teacher training, the lack of data available to MoE on teacher demand and supply and the maturity of the teachers (as most graduate when they are 18 years of age). <p>Document review</p> <ul style="list-style-type: none"> Teacher professional development, teachers learning from each other and salary increase were identified by State Counsellor Daw Aung San Suu Kyi, August 2016 The NESP (launched March 2017) identifies the TCSF as forming the basis for pre and in-service, and criticizes the current pre-service education has an overloaded and outdated curriculum, needing more opportunities for practicum and then developing specialized paths and the current 2 year course being too short. Master plan, UNESCO (2017),
	<ul style="list-style-type: none"> Two of the program components align to the government priorities; these are the four year curriculum and the TCSF. The alignment between the TCSF and four year curriculum can be strengthened as they were originally delivered in parallel. Specifically, the curriculum does not directly align with the 	<p>Consultation - All consulted stakeholders had responses relevant to this question.</p> <ul style="list-style-type: none"> The program aims to produce a TCF and a 4 year curriculum. The TCSF and curriculum are well progressed. Implications to EC management, TEO capacity and capabilities and EC ICT infrastructure if the TCSF and 4 year teacher education curriculum are to be rolled out could be significant and impact on the capacity of the education system as a whole. <p>Document review:</p>

<u>Key evaluation questions (KEQs)</u>	<u>Finding and recommendation</u>	<u>Results</u>
	<p>competencies aligned in the TCSF.</p> <ul style="list-style-type: none"> • The TCSF will influence the focus of pre and in-service training teaching and donor engagement and investments in the education sector. • It was proposed that further consideration of the implications of adopting a 4 year curriculum could have been further explored and concerns were raised on the impacts this may have on the capacity of the education system more broadly and the readiness of MoE and the education system for this change. 	<ul style="list-style-type: none"> • Program documents – The introduction of the 4 year curriculum takes place in June 2016 and its translation into Myanmar in November 2016. Previously the program focused on reviewing the current curriculum and developing a curriculum framework (presentation of this April 2016). Curriculum in recent documents is presented as a tool to be used for policy dialogue and to inform decisions about what teachers need to learn and should be trained in.. • Program documents - TCSF to be completed in the next 4 months – although recently is referred to as a draft or starting point rather than a final framework. The curriculum is not competency based as it is normally understood, the alignment between the TCSF and curriculum isn't complete, they were delivered in parallel.
<p>2. How responsive has the program been to changing government priorities? 2.1. In what ways has the program been responsive?</p>	<ul style="list-style-type: none"> • The program has a good working relationship with the DHE and the Minister. • The program could be furthered integrated across the education sector. • The program responded to individuals but with the lack of a SC broader responses at system level were less easy to integrate into the program. • The program has also been responsive to DFAT 	<p>Consultation – MoE and UNESCO consulted stakeholders had responses relevant to this question</p> <ul style="list-style-type: none"> • UNESCO produced the Master Plan for the implementation of the 4 year curriculum at MoE's request. • The consultation with government although regular, has prioritized 'developers' over implementers and end users. The program regularly engages with the government and the key members of the TCSF working groups. There has been a lot more engagement with DTET, DHE and the universities in relation to the development of the TCSF than with likely users of the TCSF such as DBE. The review and development of the curriculum had much broader engagement across government and other donors and multilateral organisations. The review of EC management and use of ICT engaged with DTET, DHREP, DHE, and DERPT. • A few interviewees reported that the STEM team and UNESCO have been influential in the Minister and DGs becoming aware of other approaches to delivering education and to shift from one system to another. • The program has no SC this was seen as a challenge to the program being well understood across the education sector with MoE and international stakeholders, the program being positioned to achieve systemic changes. <p>Document review:</p> <ul style="list-style-type: none"> • The process documents for upgrading the EC management and use of ICT solutions in EC, the TCSF and the curriculum review and development process demonstrate regular consultation with relevant government stakeholders. Minister, DTET (most engaged), DHREP, DHE, DBE, DMER, DTE, NEPC (more recently), YUOE, SUOE, Alternative Education (only recently – Jan 2017). • Since December 2016 there have been further versions of the TCSF and curriculum and they demonstrate that they have responded to the comments from DFAT
<p>3. How well has</p>	<ul style="list-style-type: none"> • The program has been planned and delivered in a 	<p>Consultation - All consulted stakeholders had responses relevant to this question.</p>

<u>Key evaluation questions (KEQs)</u>	<u>Finding and recommendation</u>	<u>Results</u>
<p>the program been delivered so far?</p> <p>4. How well have the partnerships supported the program?</p>	<p>dynamic way with little detailed long term planning on how to get to the vision.</p> <ul style="list-style-type: none"> • The program operates in a complex and challenging context which caused some delays in delivery. • The program has been delivered by a suitably resourced team with relevant skills, knowledge and expertise. • In some instances, the program delivery faced challenges from a HR perspective in relation to the breadth and depth of expertise (e.g. technical and program management). • The program team could be strengthened by leveraging partnerships and networks better. • The process could have been better tailored to participants. • The TA advice provided for the program could be improved by leveraging UNESCO's and other networks and partners expertise. This is particularly the case for gender and social inclusion. 	<ul style="list-style-type: none"> • The program was reported to not require a lot of funding to deliver. • The program started with two staff, a local consultant and an international consultant. The permanent staff for the program now includes three local consultants and one international consultant. • The program drew on four international (with expertise in curricular design, curricular reform and training) and three (?) local consultants to support the implementation of STEM. It was reported that recruiting consultants for the program was difficult (few applicants). It was proposed that the contract conditions offered by the program were not attractive. Also, contracting through an MC added extra costs and work because UNESCO wanted to work very closely with consultants. It was suggested that the UNESCO country office could draw on the regional and international UNESCO offices more. • The program has operated autonomously from DFAT, with DFAT receiving regular updates from UNESCO. A Steering Committee for the program was included in the original design but never came into effect. DFAT is invited to attend workshops as an observer. • The planning for the program, particularly in the early stages was dynamic and did not include annual planning cycles. For operational purposes the program has a three-month planning cycle and the three local consultants are responsible for one outcome area each. • The expectations in relation to what could be done within the amount of time given was unrealistic (for example: scoping and developing an ICT course in 1 month). • They were delays in delivery due to the changes of staff at MoE (key stakeholder changed three times), a lot of time spent building the understanding of the Minister and others for the need for the TCSF and curriculum upgrade. Now there is good momentum and the government is providing more direction <p>Observations:</p> <ul style="list-style-type: none"> • The process of key stakeholders to reflect lacked structure, the stakeholders didn't have a solid technical background we would have expected the process to be more structured and guided but instead stakeholders were asked what do you think? <p>Document review:</p> <ul style="list-style-type: none"> • The situation analysis took a long time and was participatory but the drafting of the curriculum was done quickly and in a less participatory manner • The timing was realistic to develop the products. There have been two no cost extensions since the program began. • The STEM team have ben reflective on the process
<p>5. How effective has the program</p>	<ul style="list-style-type: none"> • Overwhelmingly interviewees spoke of the TCSF and the 4year curriculum, a very small number 	<p>Consultation - All consulted stakeholders had responses relevant to this question, document review and observations.</p>

<u>Key evaluation questions (KEQs)</u>	<u>Finding and recommendation</u>	<u>Results</u>
<p>been in delivering on expected outcomes?</p>	<p>spoke of the ICT component unprompted and even less of the administrative and management component. The interviewees who spoke of ICT were the ECs and donors.</p> <ul style="list-style-type: none"> • The program could be furthered integrated to improve effectiveness across the education sector as it has faced challenges in reaching some stakeholders. This includes donors and multilaterals agencies working on education sector and those involved in the use of the teacher education outputs. • The relationships between the program and other donors and multilaterals was quite minimal despite the interdependencies between the investments. • The process for developing the products has engaged relevant stakeholders. Many suggested that the focus had been too much on the developers with less engagement with the implementers and users. • The process for developing the 4 year curriculum was less participatory than the one for the TCSF, the ICT was developed and implemented quickly. • The program has been effective in producing the planned outputs and through this process in successfully exposing those involved to new ways of thinking and working in teacher training. • Concerns were raised about the implement-ability of the products given the current structure of the education system, the very different way of teaching, the newness of the concepts to most of the sector in particular implementers and users. The other key concern was in relation to the appropriateness of the process in developing products that are transferable into Myanmar. Along with this a concern about the inclusiveness of the 	<ul style="list-style-type: none"> • No design document • Process: Curriculum – Language barrier is hard to address, the curricular framework is 60 pages and changing all the time, the translation didn't happen until later on the stakeholders were only reading the summaries, hard to keep them informed plus keep them engaged. The criteria for selection of teacher trainers included English language proficiency and interest statement in participating. TCSF used a participatory approach to developing the TCSF where the consultant would explain what a TCSF is (concepts) and present examples, the participants in the workshops would then discuss from the options what would be the most appropriate for Myanmar. One EC found the BC approach to building capacity better than the one adopted for the ICT training under STEM. They felt that in contrast the ICT training only reached a few, was too short and had no follow up to support the trainees • Reach of STEM– UNESCO STEM program team have limited engagement with UNICEF, WB (developed their competencies while waiting for the TCSF) and engage with JICA, DFAT, Finland. All ECs are involved in the testing of the curriculum some are involved in the development of the TCSF. DHE and DERPT are knowledgeable of STEM but DBE knew very little about the program. It is unclear how aware NEPC is of the STEM products. • Relationship between UNESCO and MoE – The STEM team is in daily contact with the two DDGs at DHE, and in regular contact with the DG for DHE and the Minister. The Minister attended the TCSF workshop (March 2017). • Involvement of Myanmar government in developing the products: Several of the local consultants, were not clear on who or how the products were developed. TCSF involved representatives from EC, DHE and DERPT and DBE, representatives from Universities of Education. Curriculum: call for involvement from EC teacher trainers in development of the curriculum had a good response (some ECs put more than two teacher trainers forward). • Products progress: TCSF will be sent to MoE at the end of March 2017 for approval before being sent to NEPC for endorsement • Product quality: It is not clear in the TCSF document how KG is addressed - not clear in the current curriculum document - it just has primary and secondary streams, Academic learning and pedagogy side. Curriculum does not explain how to teach it. <i>"We can see the module it was very beautiful but how will we deliver it?"</i> • Adoption and use – Institutional owners of the products is unclear. MoE is talking about how they will use the TCSF, specifically to inform and support teacher promotion, determine teacher salary, teacher performance assessment. Donors are waiting for the latest version of the TCSF. • Difference: before STEM there was no ICT training for ICT teacher trainers (there were no ICT teacher trainers or computers for student teachers to use). Through participation in the curriculum

<u>Key evaluation questions (KEQs)</u>	<u>Finding and recommendation</u>	<u>Results</u>
	<p>products.</p> <ul style="list-style-type: none"> The program products could be strengthened around gender and social inclusion by engaging TA and education networks. 	<p>development project one teacher reported better understanding how to use reflection in her practice. TCSF workshop participant better understand TCFs.</p>
<p>6.How were cross cutting and related issues particularly gender equality, inclusiveness (disability and other social characteristics) and child protection addressed in key STEM documents?</p>	<ul style="list-style-type: none"> The review has found that the program products do not adequately reflect gender equality and social inclusion principles. The program products do not align to the social inclusion guidance already included in Myanmar's existing education policies. The guidance in these policies is limited to some aspects of social inclusion and does not go far enough in considering gender equality, ethnic linguistic diversity and disability inclusion. Myanmar Government educational policies make reference to gender equality and social inclusion. The core program documents have scope to increase the emphasis on gender equality and social inclusion. 	<ul style="list-style-type: none"> The review of Myanmar's National Education Law (2014) and the NESP found that these documents endorse ethnicity-related inclusion and progressive recognition of disability inclusion within the Myanmar education sector. Ethno-linguistic diversity: The National Education Law states that Myanmar's Ministry of Education shall 'produce teachers who value the languages, culture and traditions of all ethnic groups in the nation'. It also provides for ethnic languages to be used in instruction at basic education level. The NESP recognises that the language barrier is a major reason for school 'drop out'. Disability inclusion: The Law provides for the establishment of separate schools and special education programs for children with disabilities, so that every child can realise their right to education. However, the NESP proposes that "efforts will be made to promote a transition from special needs schools to mainstream schools" (i.e. support for inclusive education). The NESP cites analysis from the Myanmar Disability Survey (2010), "that almost half of people with a disability have never attended school", and reiterates this in the ECCD and basic education chapters. Relevant to STEM, the NESP recognises, "the lack of pedagogical support (learning materials and teaching specialists)" as a barrier for children with disabilities. Gender equality: There is no mention of gender issues, or of attention to any teaching or learning differences between boys or girls, men or women, in the Law. The NESP mentions gender issues, but these references are qualified and tentative. For example, the NESP states that, "gender dynamics may mean that access, inclusion and quality issues are different for boys and girls," but the lack of Myanmar-specific data means that it is not clear whether this is the case. Relevant to STEM, the NESP does note that there is an urgent priority for existing teachers to be trained to use the new materials and curriculum, to better address issues relating to gender and inclusion. Child Protection: There is no mention of children's safety and protection in the Law or in the NESP. It is clear that the documents enable the introduction of international standards and practice into Myanmar. However, the documents read as generic and perhaps abstracted from the Myanmar context. The context of the relative status, remuneration and profile of current teachers across Myanmar (mostly underqualified women with variation in skill between locations) is absent. The documents do not convey the ethnic diversity of Myanmar and the fact that teachers will likely need competencies in multi-lingual, multi-cultural classroom management. With the location of ECs in conflict-affected states and with a qualified teaching workforce needed for those states, more emphasis could be placed on competencies for supporting children from

<u>Key evaluation questions (KEQs)</u>	<u>Finding and recommendation</u>	<u>Results</u>
		<p>these areas.</p> <ul style="list-style-type: none"> • There is no mention of the profile of the teaching profession itself (gender, ethnic background, living with disability). • There is no mention of teacher competencies with respect to girls and boys living with disabilities. In addition to the special education policy, there may be students with impairments enrolled in mainstream schools. • Women are well-represented in certain fields within tertiary education. Whilst women comprise the majority of teaching workforce, they are a minority in leadership roles in school management and Township Education offices. • The sex-disaggregated data in the report on the Management of Education Colleges in Myanmar is very useful as a baseline on women and men's access to leadership. • There is no information on the costs or government subsidisation of the reforms proposed.

5.2. Data sources

List of consulted stakeholders

The review consulted informants from the following organisations:

- Staff at Education Colleges including the Mandalay Education College, Yankin Education College and Taungoo Education College
- Yangon University of Education
- Department of Basic Education
- Australian Department of Foreign Affairs and Trade
- Department of Higher Education
- Department of Human Resources and Educational Planning
- Department of Teachers Education and Training
- Asia Development Bank
- Department of Higher Education
- Japan International Cooperation Agency
- UNESCO
- UNICEF
- World Bank
- The British Council
- National Education Policy Commission
- National Directorate of Education and Training

And a number of experts and individuals including locally engaged consultants, MoE advisors, program team members

Data source - list of documents reviewed

- Atkins, S. (22 Feb 2017) Broad National Consultation on the TCSF DRAFT 2.0 Proposed Approach
- CFs Annex 2 (table showing how curriculum aligns with competences)
- Field Test Guidelines: Teacher Competency Standards Framework
- Management of Education College in Myanmar: Review Report
- UNESCO (2016) Myanmar Teacher Competency Standards Framework Implementation Guide (13 July 2016) Teacher Education and Continuing Professional Development
- Myanmar Teacher Competency Standards Framework Version: Field Test Version 0.5
- Myanmar Ministry of Education / UNESCO (2017), Data for Discussion of Master Plan: Strengthening Pre-Service Teacher Education in Myanmar: Situation Analysis (August 2013)
- STEM 1: M & E Framework Revised
- TCSF Self-Appraisal Tool
- UNESCO, Yangon Office (2015), STEM Progress Report 2014 – 2015
- UNESCO: TCSF Working Group (2016), TCSF Framework Field Testing: Data Analysis Report

- UNESCO (2016), Capacity Development Plan for Teacher Educators
- UNESCO (2016), Review Report on Management of Education Colleges in Myanmar
- UNESCO (2016), Education College Curriculum Framework for 4 Year Degree
- UNESCO (2016), Education College Curriculum Review
- UNESCO (2016) STEM 2 Project Document
- UNESCO (undated) Agreed TCSF revisions based on Field Testing findings at TCSF Consolidation Workshop, 26-28 September 2016
- UNESCO (undated) Concept Note: Trainings for Education College Management and Administrative Staff

5.3. Strengthening Teacher Education in Myanmar (STEM) – Review - Terms of Reference

Overview

With an estimated 25% of Myanmar’s teachers unqualified, Myanmar has an urgent need to reform its teacher education system to ensure improved learning outcomes among basic education students. Currently, primary and middle school teachers receive pre-service training through 25 Education Colleges (ECs) geographically spread throughout the country.²⁸ The colleges have in the past been largely ignored by institutions within Myanmar’s educational hierarchy, and have been struggling to address teacher trainee needs in the face of several challenges, including extremely limited budgets, outdated curriculum and textbooks, and inadequate teaching and learning resources.

The Government of Myanmar has publicly recognised that quality teachers will be central to the delivery of quality education. Since taking office in April 2016 the National League for Democracy (NLD) government has announced that improving the quality of teachers will be a priority within their reform agenda. Prioritisation of teacher education in the National Education Sector Plan (NESP) identifies teacher education and management as one of its nine transformational shifts and provides a comprehensive overview of such a system including the establishment of a teacher competency framework as part of the establishment of a teacher quality assurance system.

In partnership with the Government of Australia, UNESCO’s Strengthening Pre-Service Teacher Education in Myanmar (STEM) project has been working with the Ministry of Education (MoE) since July 2014 to address critical issues in pre-service teacher education. Through STEM, UNESCO has provided the MoE technical and capacity-building support for the development of key teacher policy frameworks, the restructure and redesign of pre-service teacher education curriculum and programmes, and the strengthening of EC institutional management and ICT.

This review will critically examine progress made towards the project outcomes between July 2014 and December 2016. The findings of the review will be used to inform implementation under Phase 1 and Phase 2 of the project and support key management decision making.

Background

Recognising the centrality of quality teachers to improved learning outcomes and to fill a gap in Development Partner and Government support for teacher education in Myanmar, the “Strengthening Pre-service Teacher Education in Myanmar” (STEM) project was originally conceived of in 2012 as a joint UNESCO-UNICEF programme under Output 2²⁹ of the MDEF II: Quality Basic Education Programme (QBEP) 2012-2015

The STEM project was designed to deliver three key outputs under QBEP: UNICEF had responsibility for Output 1 (policy) and UNESCO had responsibility for delivering Outputs 2 and 3 (curriculum/pedagogy and management).

²⁸ Of these 25 ECs, three (Kyeinton, Katha, and Hakha) have just recently been established and are scheduled to begin operating later in 2017, and some only at full capacity in 2018.

²⁹ Output 2 : Improved quality of teaching and learning practices in basic education, indicator: pre-service teacher education framework developed and operationalised in targeted colleges.

STEM was initially intended to focus on four pilot ECs. However, in early discussions with Government, the MoE requested that-as far as possible all ECs in Myanmar should be involved in project activities. UNESCO responded to this by expanding activities to all ECs. This meant ensuring full geographic coverage in field visits for assessment reports and reviews, consulting all EC principals on project deliverables, and formulating core teams from all ECs. It also became clear early in project implementation that the two CESR reports³⁰ commissioned by UNICEF in 2013 under Output 1 were not sufficient to address the need for ongoing teacher policy dialogue to ensure sustainable systems change.

In 2014 Australia moved to a direct funding partnership with UNESCO for the implementation of STEM, independent of the QBEP program. The new agreement with UNESCO for STEM Phase One was signed on 20 January 2014 and in July the official project was launched.

STEM Phase One (2014-2017) focuses on three outcome areas:

- teacher policy,
- curriculum and pedagogy, and
- management and ICT

Whilst there has been progress : the current curriculum at ECs has been reviewed and a new 2 year diploma curriculum has been proposed; the curriculum framework for a four-year degree programme for basic and middle school teachers has been drafted; a teacher competency framework has been drafted using a participatory process; and plans for introduction of ICT into all colleges are in development and capacity building activities have taken place, implementation of STEM Phase One has not been without its challenges.

The period of political transition following the 2015 election through to the change of government in April 2016 necessitated some delays and resulted in another restructure³¹ of the MoE that required orientation of key officials. Several important policy decisions and approvals were deferred, until the establishment of the National Education Policy Commission (NEPC) in October 2016. Capacity within the MoE to take on evidence-based teacher education reforms remains low, and there is still relatively limited understanding of the fundamentals of teacher education and curriculum development at all levels

Australia granted a no-cost extension in August 2015 adjusting the end date to March 2017 to allow time to mitigate these challenges and respond to recommendations made by a project review completed in 2015.

In the progress report submitted in December 2016 ,UNESCO have estimated that by the end of March 2017, factoring in staff costs the STEM project will have disbursed USD 1.8 million of the total USD 2.5 million in funding. This is predicted to leave an unspent balance of USD 700,000. UNESCO has requested a no-cost extension until 31 December 2017 to allow for full utilisation of these funds, targeting improved ICT infrastructure in ECs, including internet access, an e-portal, and essential ICT equipment. Australia is currently considering this request.

³⁰ Hardman, F. et al. (2013). *Development of a Teacher Education Strategy Framework Linked to Pre and In-Service Teacher Training in Myanmar*, UNICEF Myanmar; Ogawa, Keiichi and Team. (2013). *A Study of the Comprehensive Assessment of Selected Educational Colleges in Myanmar*, UNICEF Myanmar.

³¹ The Ministry of Education had experienced a restructure under the previous government that had similar resourcing and policy implications.

STEM Phase Two³² (2017-2019) is expected to commence in early 2017 and will build on the groundwork laid in STEM Phase One. Phase Two will expand on activities under the three key outputs of STEM Phase One and also add a fourth output related to human rights, equity and promotion of gender equality.

Purpose and Scope of the Review

As the primary donor to STEM Australia is commissioning this review to assess overall program progress towards performance outcomes under Phase One.

The review will consider the entire period of STEM from July 2014 to March 2017, focusing on key products and the nature of the partnership between UNESCO, MoE and other partners.

The findings of the review will be used to inform implementation under Phase One (should this continue beyond March 2017 under a no-cost extension) and Phase Two of the project and support key management decision making. The primary audience for the review is DFAT post in Myanmar. UNESCO and the MoE will also be an audience for the review findings.

The key review questions will include:

- **Relevance**
 - How relevant are the STEM products and activities to the Myanmar context?
 - How responsive has the program been to changing government priorities?
- **Efficiency, Effectiveness and Impact**
 - How well has the program been delivered so far? (Consider: well targeted and delivered stakeholder engagement and involvement, program capacity/capability to deliver the program well, alignment with principles for implementation, etc.)
 - How well have the partnerships supported the program?
 - How effective has the program been in delivering on expected outcomes? (Consider all outcomes including ownership by government, usefulness of STEM products for their audience and intent, etc.)

Additionally, the key STEM products will be reviewed with a view to assessing the extent to which they are inclusive and gender sensitive.

Duration of the Review

The expected period for the STEM review is from January 30 to May 19 2017. This timeframe includes time for planning, desk review, preparation of the evaluation plan and methodology, in-country consultation and field trips, preparation of an aide memoire at conclusion of the in-country mission and final report. The first draft will be expected by 31st of March 2017: the final version will be expected to have been agreed by 19th May 2017. A detailed timeline is included at Annex A.

³² Receiving funds from Government of Finland.

Reporting Requirements

Evaluation Plan - This plan will outline the scope and methodology of the STEM review. The plan will include:

- the methodology to be used for assessing progress towards the outcomes of the program;
- the process for information collection and analysis, including tools such as questions to be asked during interviews and focus group discussions;
- identification of any challenges anticipated in achieving the objectives of the review;
- allocation of tasks of the evaluation team;
- key timings; a consultation schedule identifying key stakeholders to be consulted and the purpose of the consultations;
- activities/research to be undertaken;
- Ideally, it should also contain a draft schedule of field visits.

Aide Memoire - The Team will submit and present an Aide Memoire (maximum 4 pages) on key findings upon completion of the in-country mission (10 March). The Aide Memoire will be prepared in dot-points with discussion in reference to the DFAT M&E Standards.

Review Report – Following the in-country mission, the Team will have until the 31 of March 2017 to write and submit the draft report (max 25 pages in length, excluding annexes). The draft shall be submitted on 31 March 2017. DFAT will provide feedback to the Review Team by the 12 April 2017. The Team Leader will submit to DFAT a second draft by the 26 April. DFAT will provide feedback on the second draft by the 5 May. The Team Leader will submit the Final Report by the 12 May to agree final version with DFAT by the 19 May 2017.

Team Composition

The team will consist of 2 key individuals, including a review team leader (evaluation specialist), and an education specialist who will work closely with the TL on the review methodology, key outputs and data collection, analysis and interpreting. The team will be supported by up to two translators whose responsibilities will include data collection, analysis, interpretation and supporting report writing. They will also be responsible for interpreting for the TL and education specialist and reviewing selected documents in Burmese to identify and translate relevant extracts.

Monitoring and Evaluation (M&E) Specialist with a strong background and experience in evaluation methods and processes, previous proven skills and experience in conducting review and performance evaluation, and demonstrated ability to draw on international best practice to inform the mission. The Team Leader will possess excellent analytical skills, an ability to gather and analyse data from a range of stakeholders and interpret results and information.

S/he will have a forward-looking perspective in terms of looking for lessons and implications to inform future programming.

S/he will preferably have a sound knowledge of DFAT corporate policy on quality reporting system and business process for aid delivery and will be conversant with DFAT/MFAT development assistance procedures/regulations and policies. S/he will have working knowledge and

familiarity of cross cutting issues such as gender, disability inclusion and development partnerships. S/he requires an understanding of Myanmar social and political context. S/he has a high level of professionalism and commitment to delivery of results and excellent report writing skills (in English).

Education Specialist – The education specialist will have previous experience of DFAT evaluations and a breadth and depth of experience in the education sector and in particular, the following areas:

- The design and development of TCSFs
- Validation and uses of TCSFs
- Curriculum design for initial teacher training
- Knowledge of UNESCO ICT standards and the uses of ICT for teacher training

Local Translator(s) – preferably with knowledge of the education sector and able to translate educational terminology. Ability to review and provide summaries of documents in Burmese and interpret and translate from Burmese to English and English to Burmese.

DFAT supported by post will provide access to key individuals (within and outside of DFAT post) and relevant documents throughout the review and conduct timely reviews of the draft outputs throughout the review.

Key Data Sources

International literature, peer reviewed articles and grey literature relating to TCSFs, competency-based curricula etc as well as program documents and products supplied by UNESCO and DFAT.

Key informants will be drawn from the

- UNESCO team and associated TA
- Members of the various working groups
- Development partners e.g. World Bank
- Department of Higher Education
- DFAT team
- Colleges of Education
- University of Education
- At least one day will be spent visiting a College of Education

A full list of key informants has been provided separately.

Key Documents

1. STEM Program Design Documents, including Results Framework
 - a) STEM Progress Reporting
 - b) Education College Curriculum Review (29th February 2016)
 - c) Education College Curriculum Framework for Two-Year Diploma (option for transition period to four-year degree)

- d) Education College Curriculum Framework for Four-Year Degree
- e) Capacity Development Plan for Teacher Educators
- f) Teacher Competency Standards Framework
- g) Management of Education Colleges Myanmar: Review Report and Capacity Development Plan
- h) Assessment of ICT capacity in Education Colleges
- i) Framework for ICT development in Education Colleges.
- j) CESR
- k) NESP

Further documents may be requested of UNESCO and DFAT before and during the mission.