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TVET Teacher Survey Myanmar Report

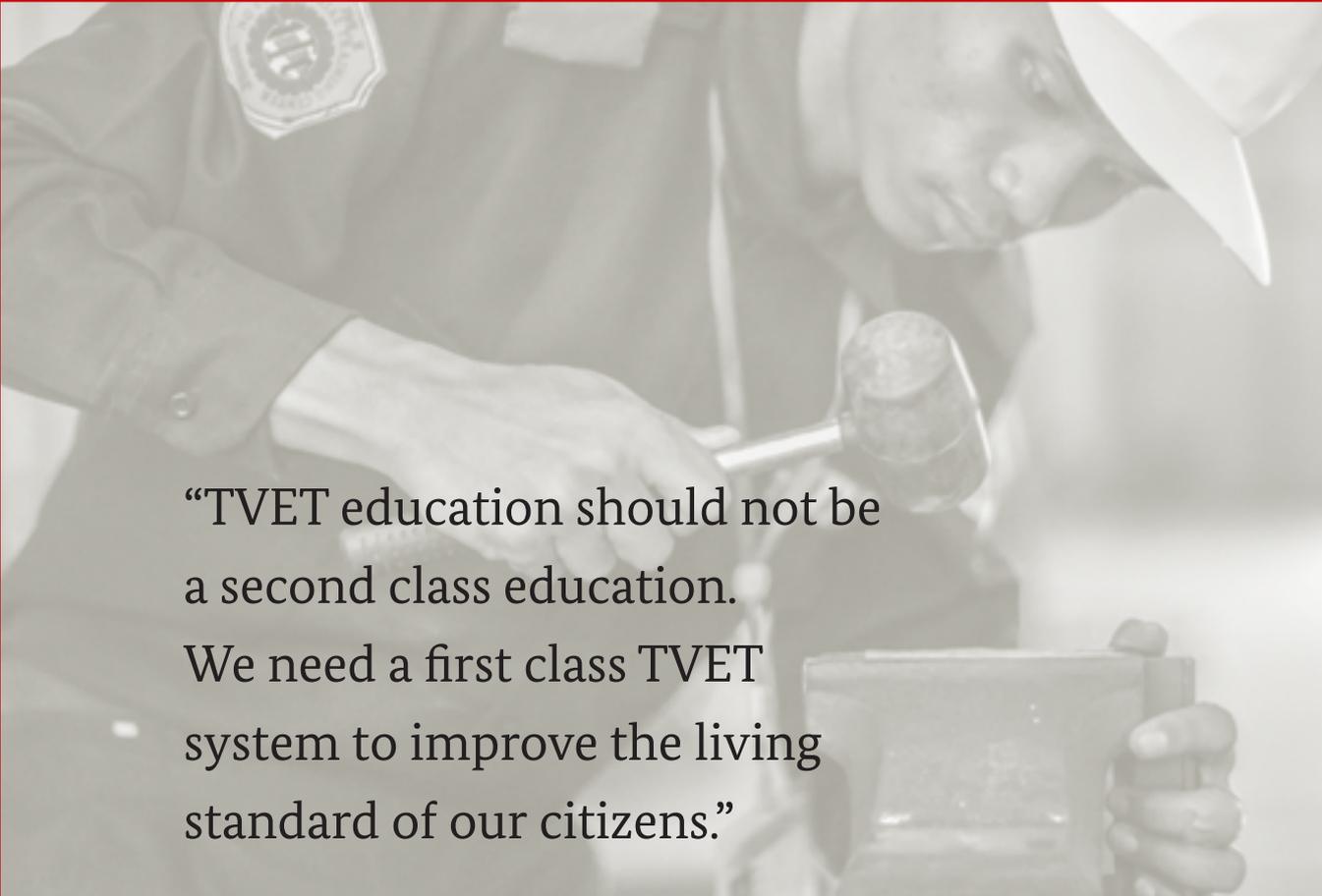
Promotion of Technical and Vocational Education and Training
in Myanmar

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“TVET education should not be a second class education. We need a first class TVET system to improve the living standard of our citizens.”

Daw Aung San Suu Kyi,
State Counsellor at the National TVET
Forum, 15 July 2016

1 Introductory remarks

1.1 Introductory remark by Ministry of Education (MoE)

The Ministry of Education (MoE) has launched the education sector reform process to improve the quality of the education system in Myanmar. As outlined in the National Education Strategic Plan (2016-2021), one important subsector is TVET which is vital for nurturing skilled human capital needed for sustainable economic growth of the country.

For the successful implementation of the TVET reform, we believe that there is a need to highlight the crucial role to be played by TVET teachers as change agents and also a need for a new assessment of the meaning and importance of TVET teachers in modern industrial societies of the 21st century. In addition to that, the existing status of the teachers has to be analysed and understood in order to address their needs for improvement.

There is a convincing national and international evidence that points to the importance of reliable information and research in implementation of successful reform process, and therefore, we mobilized more than 1,200 teachers from 56 GTIs/GTHSs/GTCs schools under MoE to undertake this baseline survey. We highly invested in evaluating our work so that we can learn from what we have done and can do better in the future.

The report illustrates the results of a comprehensive survey and informs the relevant ministries and Development Partners about strengths and weaknesses of technical teachers and helps target the needs for improvement. Various graphs are used to display the results. We sincerely hope that this report can be an excellent resource for the TVET personnel and findings of the report can be very supportive for the upcoming planning of the TVET sector development, especially concerning the qualification and capacity building of teachers.

We highly appreciate the teachers who participated in this survey as well as Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and German Institute for Development Evaluation (DEval) for conducting and finalizing this survey and report.



Dr Aye Myint
 Director General
 Department of Technical and
 Vocational Education and Training
 Ministry of Education

1.2 Introductory remark by Ministry of Industry (MoI)

Nowadays, the skills and competencies of a nation's young population are vital to compete with other countries in the highly competitive global economy. The qualified teachers and effective teaching techniques play an important role in providing those skills to the students. This teacher survey aims to support the increase in quality of the teaching system in the TVET sector.

The Ministry of Industry also has an important vision of the "Creation of Industrially Developed Country". For this reason, nurturing the skilled workers is really important to meet the goals of this vision. Therefore, the Ministry of Industry establishes the 6 Industrial Training Centers (ITCs) and trains the students to be skilled workers. These workers will become the workforce of the domestic industries. Thus, their skills should match up with the industrial needs.

This survey also analysed the coordination between TVET schools and industries. Almost all teachers from ITCs participated in the survey. So, I believe that this survey can reflect the situation of teachers from ITCs and also allows readers to have an insight into the present TVET system of the country.

Without having such kind of data analysis, it is not easy to evaluate the impact of the TVET schools. It is worthwhile to analyse the findings and consider adapting them in the long-term human resource planning.

In conclusion, I really express my gratitude to the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, German Institute for Development Evaluation (DEval) and teachers who answered the survey for their effort and contribution to the development of this survey.



U Ko Ko Tin

Director General

Directorate of Industrial Collaboration

Ministry of Industry

1.3 Introductory remark by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Vocational teacher training plays a critical role in the economic and social development in Myanmar, as teachers are the key players in educating youth and skilled labor force for the ever-changing and growing economy of the country. Currently, there is a lack of skilled labor force in main sectors such as agriculture, energy, manufacturing, infrastructure and tourism, which is one of the main constraints for the economic growth.

As a response to this conundrum and in support of Myanmar's efforts to address its most pressing economic challenges, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH implemented the following three technical cooperation projects in the field of sustainable economic development in Myanmar on behalf of the German government: private sector development, finance system development, as well as technical and vocational education and training (TVET).

The creation of a well functioning education system and its TVET component needs to be a priority for the Myanmar government, whereby teacher training should be addressed with utmost attention. Fortunately, the ongoing education reform has been enjoying a strong and nationwide political support. The main responsibility for education in Myanmar lies within the Ministry of Education. The Department

of Technical and Vocational Education and Training (DTVET) takes care of the education subsector TVET. But also other ministries, e.g. the Ministry of Industry runs institutions for vocational education. As the main provider of technical and vocational education and training, the DTVET under the MoE is responsible for teachers' training and capacity building, as well as for the provision of teaching materials.

In support of the ongoing reform efforts of the education (TVET) sector, the responsible ministries cooperate with a variety of development partners. GIZ's TVET programme, well established with stakeholders from the public and private sector, specifically supports the training of TVET teachers and school managers - both being major change agents for the realization of the ongoing reform efforts towards an employment oriented TVET system that enables a well skilled and competitive workforce. Capacity development measures, such as methodological and practical trainings, have already been conducted for teachers and TVET school managers of the six Industrial Training Centers (ITC) under the Ministry of Industry, as well as of the numerous TVET institutions under the Ministry of Education. However, it takes a long way to move from traditional teaching style to modern action oriented teaching and learning.

Up-to date and reliable data on TVET teaching staff in Myanmar are scarce. As an attempt to better understand the current situation of the teaching staff, and in order to better address their needs in the design of future support measures, this baseline study provides rich insights into the conditions faced by technical teachers in TVET schools.

The survey was conducted in the year 2016. The target group consisted of technical teachers from 57 schools under the Ministry of Education and six ITC schools under the Ministry of Industry. The research approach of the survey was done in close cooperation with the German Institute for Development Evaluation DEval.

2 Teacher Training - an important element of the TVET reform

The role of education in Myanmar is receiving rising attention, which is also to be observed by the growing education budget from 6% (2014-2015) to 8.5% (2017-2018) (ADB 2017). The NESP, which is the driving guideline towards improving the education system in Myanmar, mentions transformational shifts which will be needed to reach the expected goals. The TVET transformational shift stipulates that “more learners can access TVET and graduate from quality-assured and labor market-responsive TVET programs under a more effective TVET management system” (NESP 2016, 27) and is supported by several strategies and components.

The second strategy emphasizes strengthening the quality and relevance of TVET. This strategy is followed by the component: training for preservice and in-service TVET teachers. It is explained that the introduction of a demand-oriented, competency-based TVET system requires teaching staff with contemporary knowledge and skills.

Therefore, both pre-service and in-service teachers will be trained in practical skills development and effective pedagogy and teaching strategies. The Technical Promotion Training Center (TPTC) - Baelin will be upgraded to a national Centre of Excellence for TVET teacher training. This centre will develop master trainers and subject specialists who can prepare, deliver and assess practical oriented training courses.

Yet, there is a huge gap between the current traditional rote teaching style and the required modern teacher, equipped with action oriented teaching and learning approaches.

The industry needs competent skilled workforce, who are also able to think in advance, to solve problems, to communicate effectively and are able to learn lifelong. Therefore, active student-centered learning should lead to the better employability of students. However, at the school level, teachers seem to lack technical and didactical skills, as well as experience and confidence to implement the newly required teaching models.

Economy is quite dynamic and in huge need of professionally skilled labour. Therefore, a higher quality of Technical and Vocational Education and Training (TVET) is a prerequisite for the success.

The inadequate skills of graduates from TVET schools, which do not match with job requirements, are a result of the supply-driven TVET school programs and lack of synergies with the industries.

In this context, it is of great importance for GIZ and the involved ministries to learn as much as possible about teachers' current situation and their training needs.

The more we know about the current status, the easier it will be to adjust the interventions to the biggest needs and to foster a transformational shift from traditional to modern teaching and learning of pedagogically and technically high quality. Teachers are the convertor for the learning process of the students. Therefore, it is of utmost importance to qualify this change agents properly and equip them with the know-how for delivering labour market and action oriented training.

3 Structure and approach of the teacher survey

The objective of the present baseline survey and needs assessment was to provide quantitative information on the education status and the teaching situation of formal TVET teachers in Myanmar. This data should contribute to the alignment of further interventions in the respective fields of teacher training in Myanmar to teachers' needs. The following chapters explain the survey design as well as the implementation of the survey (3.1). The survey's preparation and its evaluation were done in cooperation between the Deutsche

3.1 Survey design and implementation

As the GIZ TVET project aims at establishing a sustainable system in the field of teachers training, it was crucial to collect reliable data on the current and specific situation and training needs of technical teachers under the mentioned ministries. The findings and results of the survey provide better knowledge about the target group and are taken into consideration for the planning of further activities and measures aiming at strengthening capacities of TVET teachers. Therefore, a broad sample of 1,580 technical TVET teachers in Myanmar was involved in the baseline survey.

A total of 63 TVET schools took part in the baseline survey, located in 53 different cities throughout Myanmar. Six of these schools are Industrial Training Centers (ITC) under the Ministry of Industry, 57 schools surveyed are Government Technical Institutes (GTI), Government Technical High Schools (GTHS) or Government Technical Colleges (GTC) under the Ministry of Education. In order to ensure

Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the German Institute for Development Evaluation (DEval). In cooperation with DEval, the survey questionnaire was designed and implementation options for the survey planned and discussed as further described in chapter 3.2. The chapter 3.3 describes the approach of the data analysis at hand.

the qualitative monitoring, the collection of the questionnaires was organized directly within the TVET schools. Therefore, 63 schools were allocated to eleven clusters according to the location of the schools. The eleven clusters are namely Mandalay GTHS, Magway GTI, Mawlamyine GTI, Monywa GTHS, Myitkyina GTHS, Naypyitaw GTHS, Pakokku GTHS, Patheingyi GTHS, Taunggyi GTHS, Ywama GTHS and Thandwe GTI (see attachment, Figure 26).

School survey coordinators were selected at each of the participating schools to ensure that the response and return rate of the questionnaires were high. Almost 100 teachers were involved as school survey coordinators. There were two coordinators in bigger schools of over 22 teachers or even three in schools with over 55 teachers. One sample coordinator was assigned with the task of the cluster coordination. The main task of the sample coordinator was the planning and organizing of cluster meetings with the school survey coordinators from each TVET school.

In eleven meetings – one for each cluster – the sample coordinator presented the purpose of the teacher survey and explained the questionnaire to the school survey coordinators, who were entitled to coordinate the conduction of the survey. In addition, the sample coordinator supported the successful implementation of the survey by follow-up consultancy and enforced the submission of the filled-in questionnaires to the GIZ TVET office in Yangon. The concept of one main sample coordinator,

3.2 Description of the questionnaire

The teacher survey was conducted with the help of questionnaires that aimed at the self-assessment of the teachers. This written answering format was chosen as a time and cost-efficient research data collection for the survey's goal of compiling quantitative data from a big group of respondents from all over Myanmar. The written format is adequate for the target group of teachers and no obstacles for the response rate were expected, especially as the questionnaire was available both in English and in Burmese language. The translated version of the questionnaire was tested with several teachers before conducting the survey.

The questionnaire consists of five main sections with subquestions. The sections that should determine the teachers' situation are as following:

- General information
- Skills and training needs
- Teaching conditions at school, curriculum, school materials
- Students

the structured cooperation with assigned school survey coordinators in each of the schools, as well as the cluster meetings prior to the implementation of the questionnaires to clarify existing questions and concerns led to an extremely high response rate of almost 87% of questionnaires.

Within the reporting period, a total of 1580 questionnaires were sent out. 1366 of these questionnaires were completed and resubmitted by the teachers.

These categories are to be answered through an entity of 53 questions. The questionnaire uses four kinds of answering formats: multiple choice, sentence completion, scale-rating and open-text questions. 38 questions consist of a closed-ended format with multiple choice answers.

The teachers were asked to indicate which of the given statements match the best with their individual situation, intentions and needs by circling one or multiple answers. The sentence completion was used within 12 questions in order to find out about employment and educational background. Two questions were formulated as statements, where the teachers had to rate their response on a continuous scale (e.g. Q45: 1=completely disagree to 4=completely agree) in order to find out e.g. about skills and the teaching staffs' motivation, while one question on skills standards was an open-text question.

In each school, the school survey coordinators distributed the questionnaires and asked the tech-

nical teaching staff to answer 53 questions of the questionnaire, which took approximately 20 minutes for a total of 12 pages. The questionnaires did not ask for any personal information to ensure anonymity throughout the whole process. The teachers were asked to answer all questions

3.3 Data analysis

The data was analyzed with the use of descriptive statistics together with simple graphic analysis. The analysis was conducted by the German Institute for Development Evaluation (DEval) in consultation with the GIZ team to answer the key questions of interest and to describe the basic features of technical teaching staff in Myanmar on the basis of the collected data.

This basic approach was chosen to present the quantitative description of a big sample. The descriptive analysis was chosen to receive meaningful quantitative information and a summary of the status and future training needs for further interventions with the group of technical teachers in Myanmar. One constraint certainly involves the question whether all participants clearly understood the intention of the questions.

and were strongly encouraged not to skip any question in order to avoid missing data. Furthermore, the questionnaires were filled out individually and the school survey coordinators were instructed to hinder discussions among the teaching staff while answering, as they could influence the data.

To prevent these misunderstandings, the questionnaires were professionally translated into Burmese language.

During the cluster meetings with school representatives – the school survey coordinators from each of the 63 participating TVET schools – the sample coordinator thoroughly explained the questionnaire in detail. Together, they looked at all questions to clarify concerns and to avoid misunderstandings and uncertainties. Furthermore, the sample coordinator explained the relevance of the teacher survey in general and how important it is to gain reliable data to be able to adjust further support and capacity strengthening measures to the real needs and demands of the teachers in the light of the TVET transformational shift.

4 Results of the TVET teacher survey in Myanmar

This section presents a general description of the results of the teacher survey. The findings give a deep insight into the current situation of technical and vocational teaching staff in Myanmar, as these findings reflect the situation

4.1 Information on teachers' background

This chapter gives an overview on gender differentiated enrolment among the teachers, on their educational background and their work experiences

in the following five categories: Information on teachers' background (4.1), Current situation (4.2), Skills and training needs (4.3), Teaching conditions at schools (4.4) and Students (4.5).

prior to their assignment as TVET teachers. The results show that nearly 80% of the TVET teaching staff in the schools are female and 20% are male.

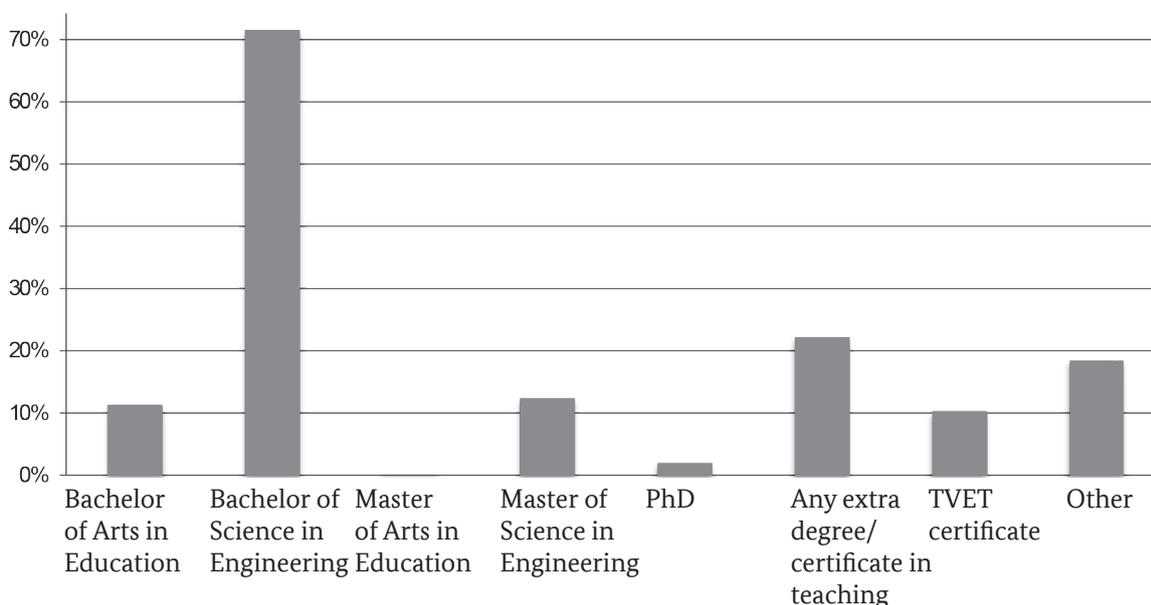
Figure 1: Gender enrolment among the TVET teachers.



As shown in Figure 2 below, almost 90% of the teachers have a technical academic background and hold a Bachelor of Science in Engineering degree (70%) or even a Master of Science in Engineering degree (12%). Over 10% did their Bachelor of Arts in Education.

Some of the teachers hold additional degrees or certificates in the field of teaching. This shows that there are different pathways to become a teacher for technical and vocational education, but the most common way is a technical academic background.

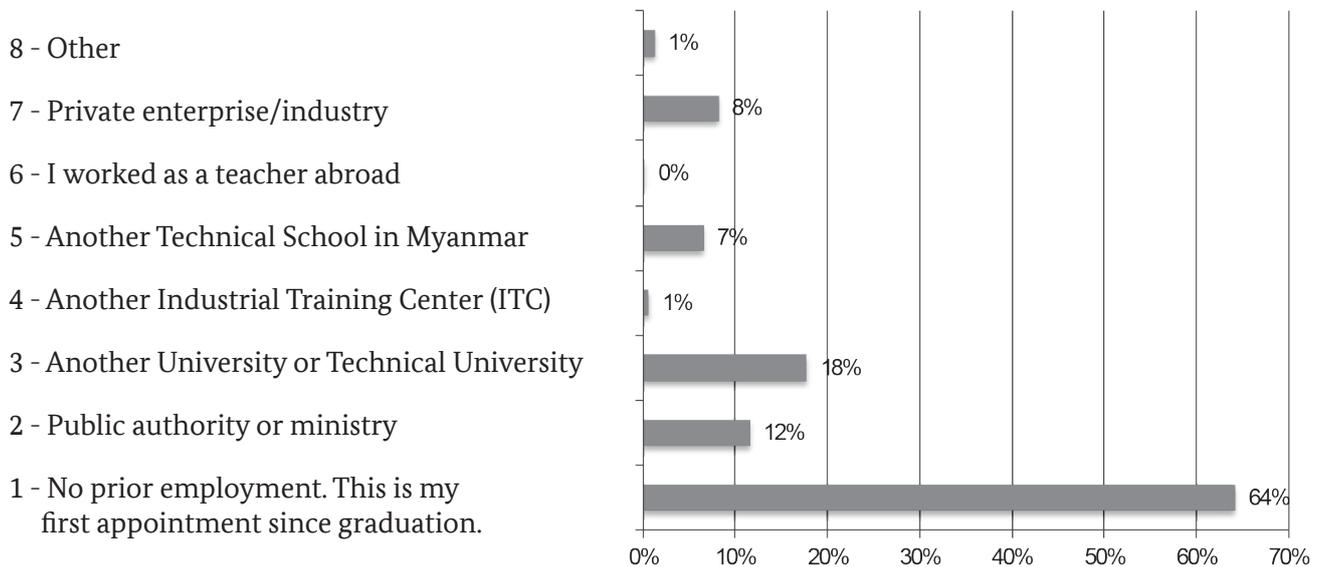
Figure 2: Educational background of TVET teachers. Multiple answers were possible.



1,000 out of the total of 1,366 respondents completed their education in Myanmar, while 55 teachers studied abroad. 584 (approx. 43%) of the respondents received practice-oriented training by (additionally) studying at one of the vocational training centers under MoE and MoI (GTHS, GTI and ITC), multiple answers were possible. As shown in Figure 3, 64% of the teachers state that they have no prior working experience other than their current employment,

as the technical teacher role is their first working position to be held. About 26% (answers 3, 4 and 5) of the teachers are already experienced in the field of teaching due to prior assignments at (Technical) Universities or Schools and Industrial Training Centers. 12% of the teachers worked for public authorities or ministries before. Only 8% could gain practical experience by a prior employment in the private sector.

Figure 3: Prior work experience. Multiple answers were possible.



4.2 Current situation

The vast majority of the participating TVET teachers are employed by the MoE (over 90%), whereas 8% are employed under MoI and work as technical teachers for one of the participating Industrial Training Centers.

According to the distribution of current position held among the respondents, 87% of the questionnaires were filled-in by teachers and instructors.

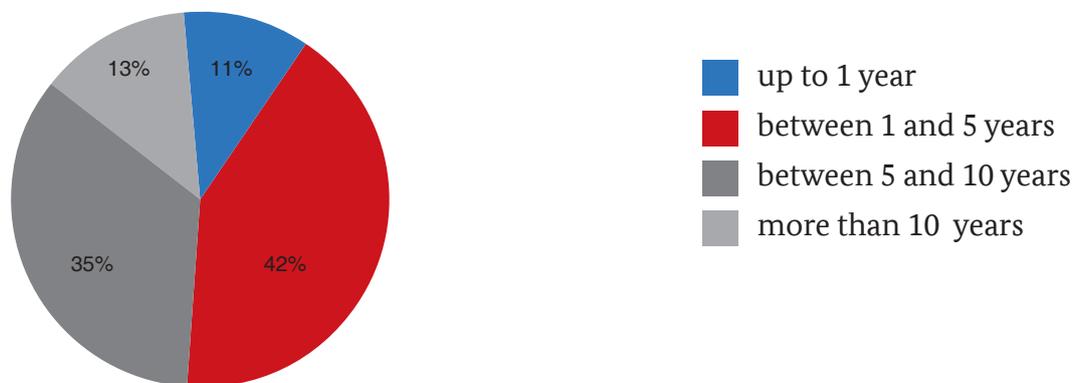
13% of the questionnaires were filled in by school management staff like principals, vice-principals and heads of departments.

In regard to the working experience of the teachers, 11% are newly recruited with up to one year of experience, 42% - the majority - have been working between 1 to 5 years, 35% over five years and 13% have over ten years of experience in teaching

in vocational education. The results of the work experience, measured in years of employment, show that the ratio between very experienced teachers

(approx.13%:morethan10years)andinexperienced, newly recruited teaching staff (approx. 10%: up to one year), is quite balanced (Figure 4).

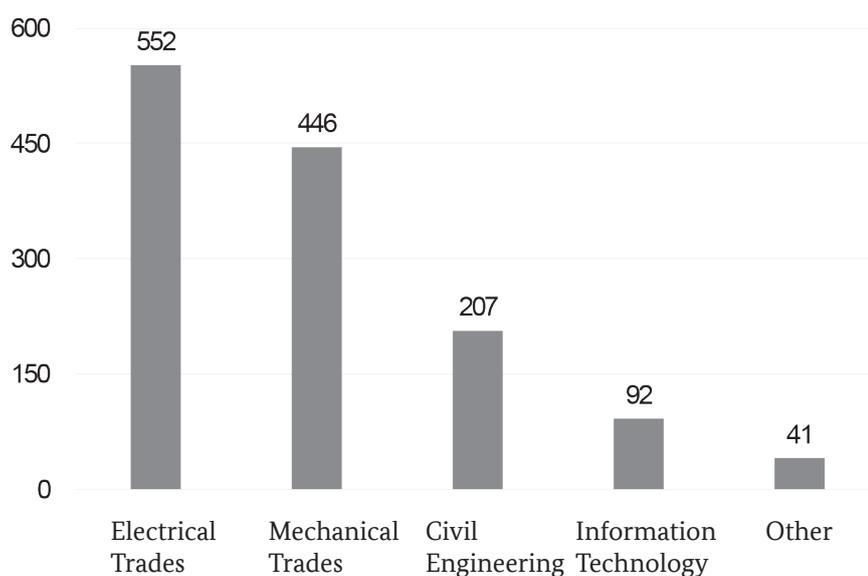
Figure 4: Work experience of TVET teachers in years.



The respondents were asked by the means of a free-text question to specify their main subject in the frame of their current employment. The answers were clustered and subordinated into five main categories. As shown in Figure 5, the majority (552) work in Electrical trades (including Electronic, Electrical Power, Electrical Engineering, Air-Condition and Refrigeration), followed by 446 teachers working in Mechanical trades

(including Mechanical Engineering, Machine Tool Operator, Tool & Die Maker, Mechanical Draughtsman, Technical Design, Machinery Fitter, Plant Mechanic and Motor Vehicle Mechanics/Automotive). 207 teachers are employed as teachers for Civil Engineering (including Foundry and Pattern Maker), 92 at Information Technology and 41 in other trades (including Hotel & Tourism and Railway).

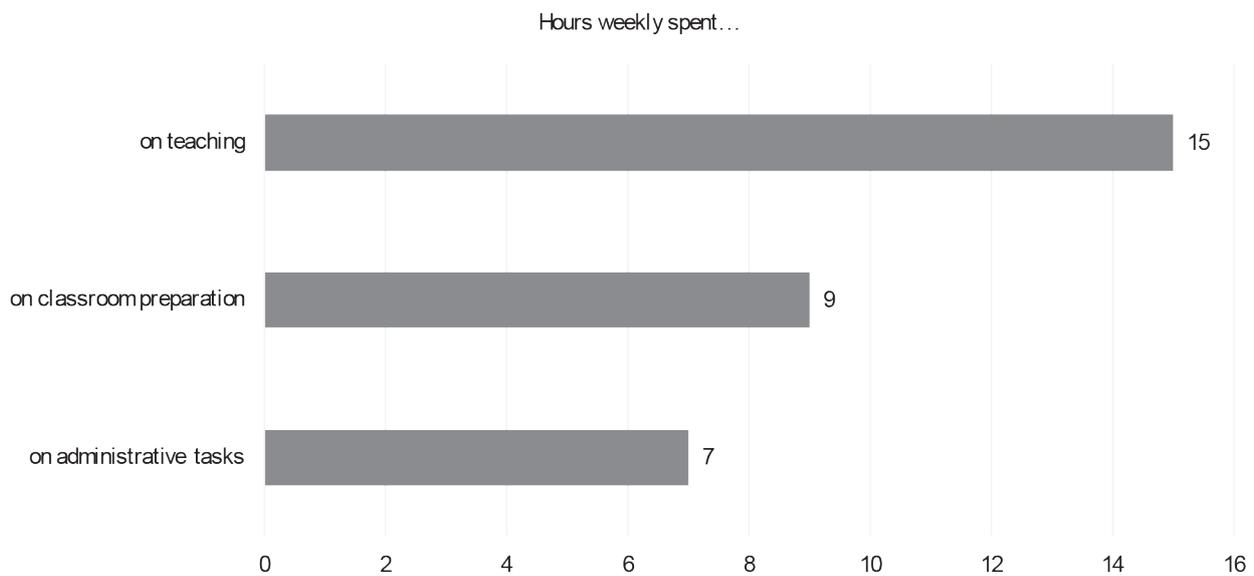
Figure 5: Trades/Main subjects at the current employment.



20% of the teachers stated that they teach exclusively theory lessons and only 5% of the teaching staff mentioned teaching only practical lessons. TVET teachers in Myanmar spend an average time of 15 hours per week on teaching (theory and practical lessons). In addition, an average of 9 hours is spent on classroom and teaching

material preparation (lesson planning) and 7 hours on administrative tasks. That makes a total of 31 working hours per week (Figure 6). Half of the teaching staff replied that they have additional duties in their school besides their job as a teacher or instructor.

Figure 6: Working hours spent weekly per field of responsibility.



The respondents were asked if they intend to leave their TVET institution in the near future. Around 21% said yes. Around 15% plan to

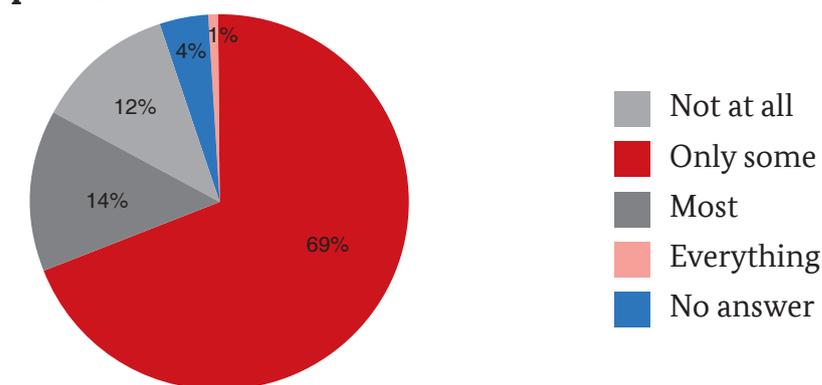
stay in the field of vocational teaching and just intend to transfer to another location or institution.

4.3 Skills and training needs

The majority of teachers (69%) indicated that they are not successfully prepared for their profession as a teacher, as only little of the knowledge and skills they gained through prior studies are relevant to their current employment. 12%

mentioned that prior skills and knowledge are not at all important or adequate. Only 14% of the teachers can rely on their educational background and 1% are able to use most or even everything they learned before (Figure 7).

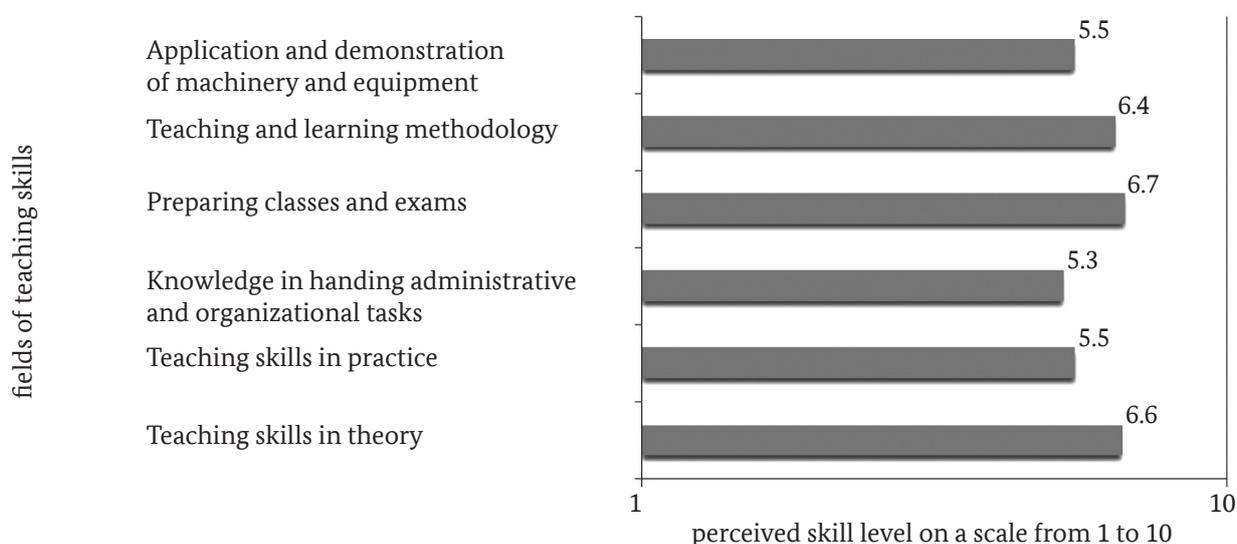
Figure 7: Percentage of knowledge and skills from educational background to be used for current position.



The teachers were asked to rate their skill levels in several areas regarding teaching on a scale from 1 (very low) to 10 (very high) as shown in Figure 8. TVET teachers rated their skill levels in mostly all categories as moderate. On average, the teachers ranked their skill level in

‘preparing classes and exams’ and ‘teaching skills in theory’ as the highest, whereas they rated their skill level in ‘handling administrative and organizational task’ with an average of 5.3 as the lowest.

Figure 8: Teachers’ perception of skill level in the field of teaching. Multiple answers were possible.



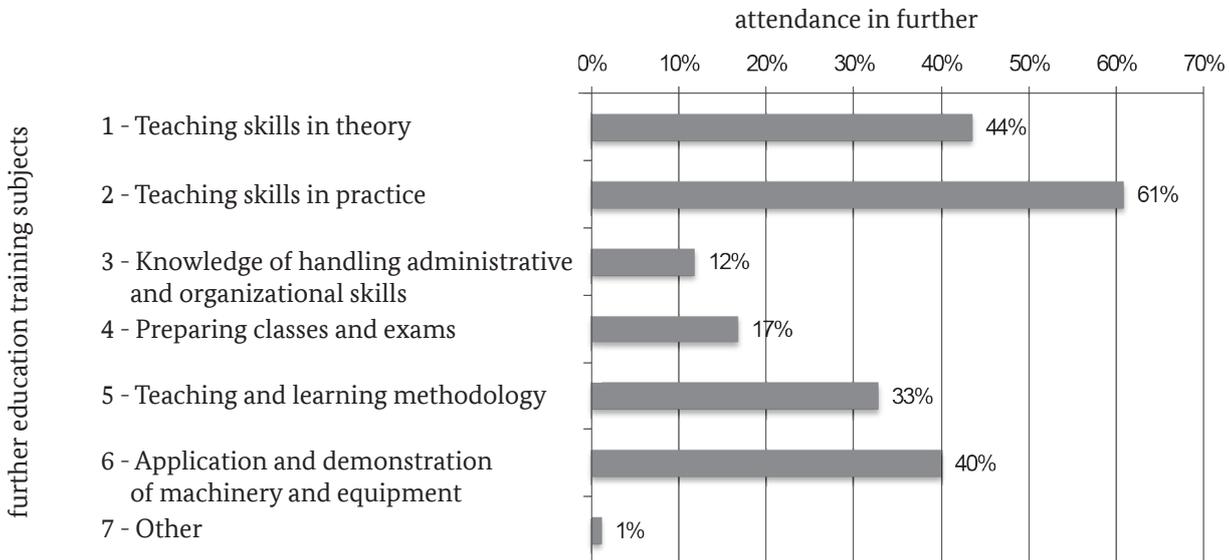
Most of the teachers (around 85%) stated that they already attended further training since taking the role of the technical teacher in the vocational education and training. In more than half of the cases the training for the teachers was chosen by the school management (60%) and 40% applied for the trainings on their own initiative in order to

learn something new. The teachers who attended further education and training undertook in average 2 trainings per person with an average length of the trainings of 12 days. The majority of those who already attended further training (approx. 61%) attended further education offers in the field of ‘teaching skills for practice’.

Around 44% attended training in ‘how to teach theory lessons’ as specified in Figure 9. ‘Application and demonstration of machinery and equipment’

(40%) and ‘teaching methodology’ (33%) are other often attended fields of further training.

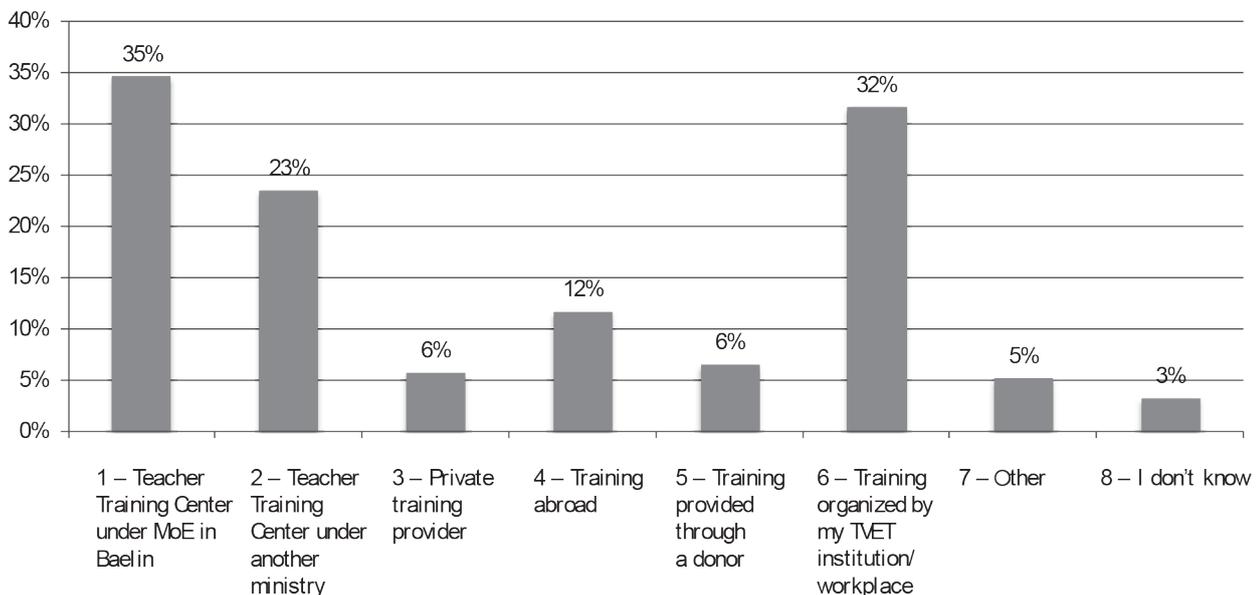
Figure 9: Training subjects in attended further education trainings since employment as a TVET teacher. Multiple answers were possible.



Approx. one third (35%) of the TVET teachers participated in training offers provided by the Technical Promotion Training Center (TPTC) in Baelin under the Ministry of Education. As illustrated in the below Figure 10, another third

(32%) were trained by their respective teaching institution and the last third (30%) stated that their further training was provided through donors, private institutions, abroad or other providers (not specified).

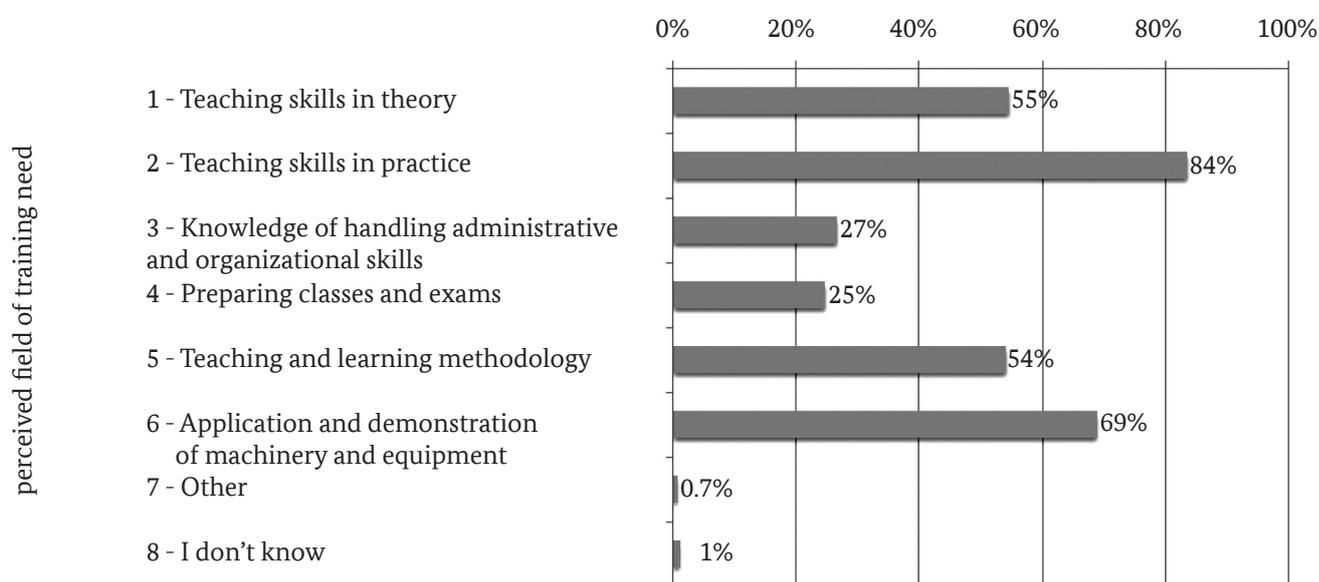
Figure 10: Training providers for further teacher training. Multiple answers were possible.



All respondents were asked to specify if they would like to attend further trainings in the future, whereby 93% of all asked teachers answered ‘yes’. After specifying the prior training offers, the TVET teachers attested which training topics they would need most in the future, multiple answers were possible in this multiple choice question. The majority lacks technical experience, knowledge and skills in practical teaching:

84% mentioned that they want to have more trainings in the field of ‘teaching skills in practice’ and 69% claim to have a need for training in the ‘application and demonstration of machinery and equipment’. Furthermore, 55% of the teaching staff would like to be trained in ‘teaching skills in theory’ and 54% in ‘teaching and learning methodology’ as illustrated in Figure 11.

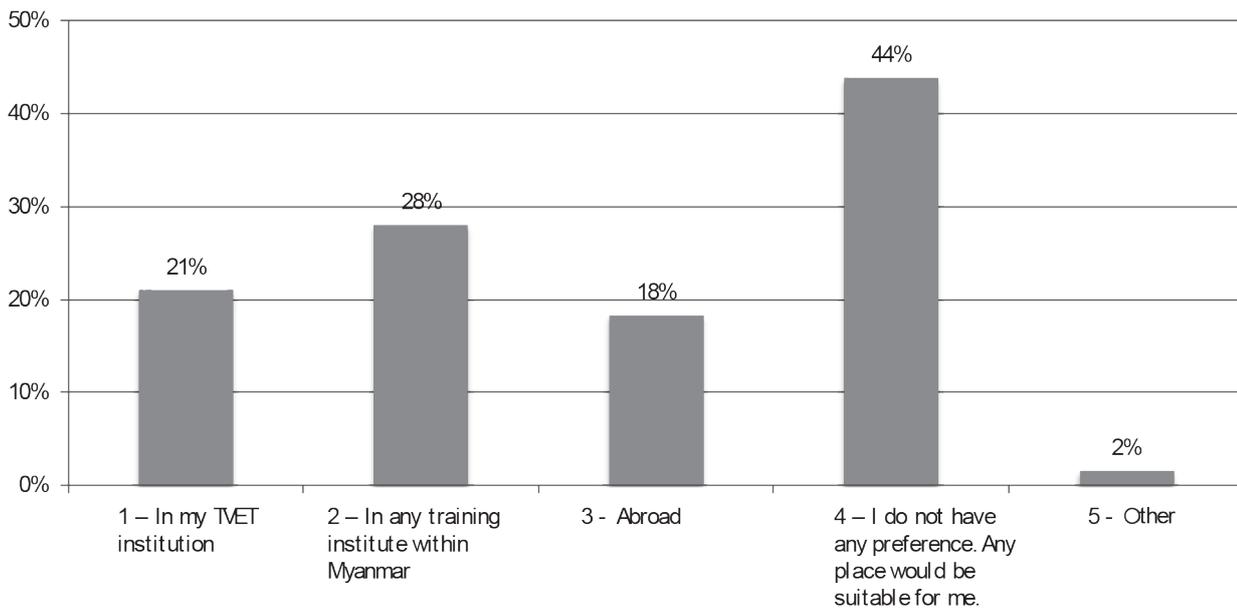
Figure 11: Perceived need for further training topics. Multiple answers were possible.



It is interesting to see for the planning of further trainings in Myanmar that 44% of the participants are fine with any training location and have no special references as shown in Figure 12.

28% respondents stated that any place in Myanmar would be fine. Only 21% would prefer to participate in trainings in their respective TVET institution. Over 18% are open to receiving training abroad.

Figure 12: Preferences of training location.

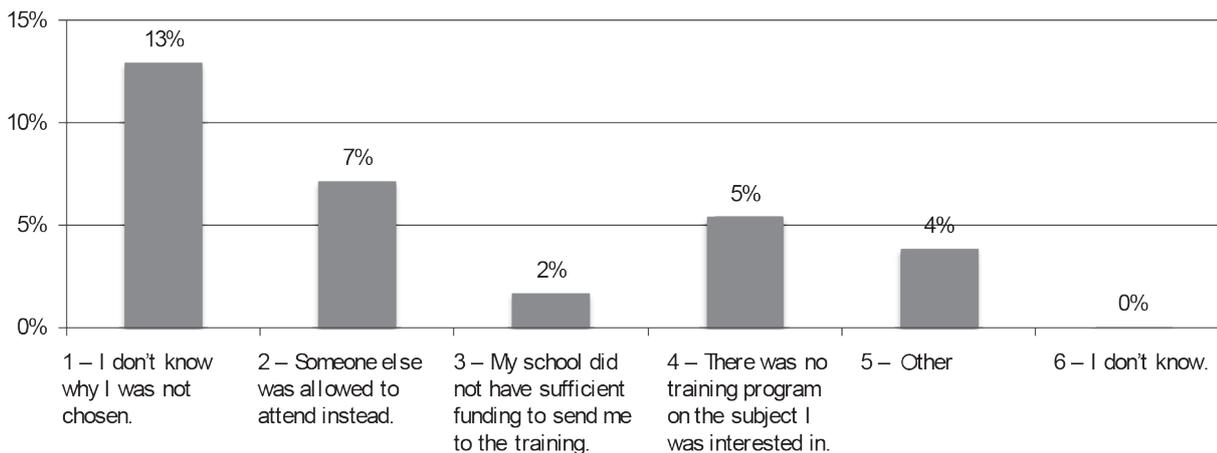


A quarter of respondents stated that they unsuccessfully applied for a training offer in the past and their participation was rejected. The reasons for this refusal of training participation differ from ‘I don’t know why I was not chosen’ (13%) to ‘someone else was chosen’ (7%) or the ‘intended training topic was

not offered’. 5% answered that there was no matching offer of training and 2% of the teachers mentioned the ‘lack of training budget’ in their school as the reason for the unsuccessful training application (Figure 13).

Figure 13: Reasons for teachers’ refusal to participate in further trainings.

Multiple answers were possible.



4.4 Teaching conditions at school

This chapter highlights the results of the questions on the current conditions for teaching and learning in the TVET institutions. The main focus is laid

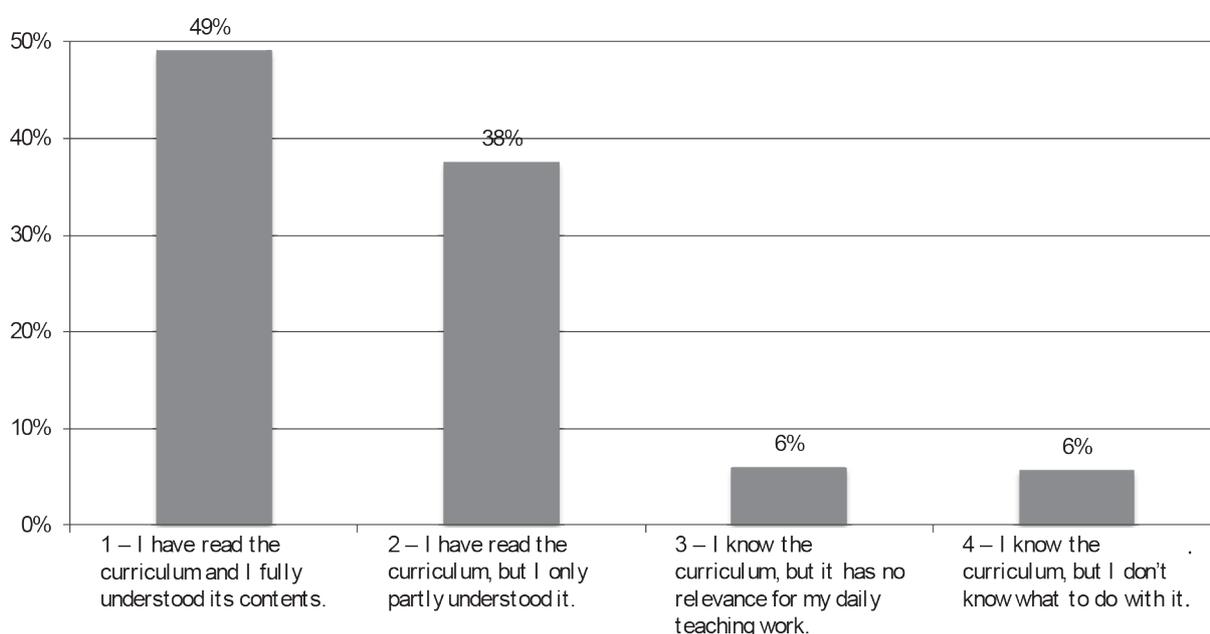
on the implementation of standardized curricula, the usage of teaching aids and the application of teaching methods.

4.4.1 Usage of curriculum by TVET teachers

The majority of 95% of the teachers have a curriculum for their main subject or trade subject. Only 3% answered that they do not have a curriculum, 2% did not answer. From these 95% who received the curricula, nearly 62% answered that the curriculum was provided by their principal, 33% answered that someone else gave it to them.

Around half of the TVET teachers who have a curriculum also claimed that they read it and fully understand the content. 38% just partly understood it and 12% answered that the curriculum is not relevant for their work or they do not know what to do with it.

Figure 14: Usage of curriculum by TVET teachers.



87% of the teachers currently work with a syllabus at their TVET institution, around 10% do not (3% did not answer). 70% of TVET teachers who have a syllabus received it from a superior or colleague. Approx. 18% claimed that they developed their own syllabus according to their experience and in line with the curriculum. Only 3% said that a syllabus is not

relevant for their teaching. The interviewed persons were asked whom they would ask for help if they needed some in the field of teaching, multiple answers were possible. The majority (around 76%) ask their colleagues in such cases, around 55% try to solve problems on their own and 50% are looking for (additional) help on the internet.

4.4.2 Teaching aids and equipment

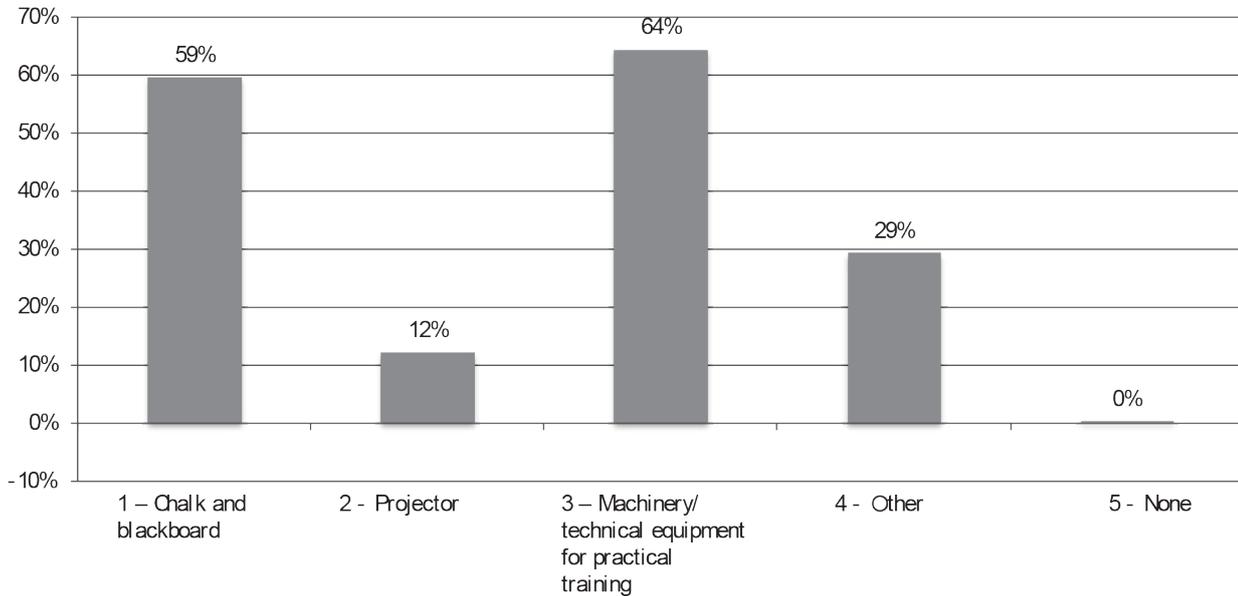
The following illustration (Figure 15) shows which teaching aids and equipment are regularly used by the teachers in their classes

and/or workshops. 64% of the respondents use machinery and technical equipment for practical lessons. Also the use of boards like blackboards

or whiteboards is very common (59%). 29% of the teachers answered that they additionally use

other teaching aids and 12% of the teachers use projectors during teaching.

Figure 15: Teaching aids and equipment used by TVET teachers. Multiple answers were possible.

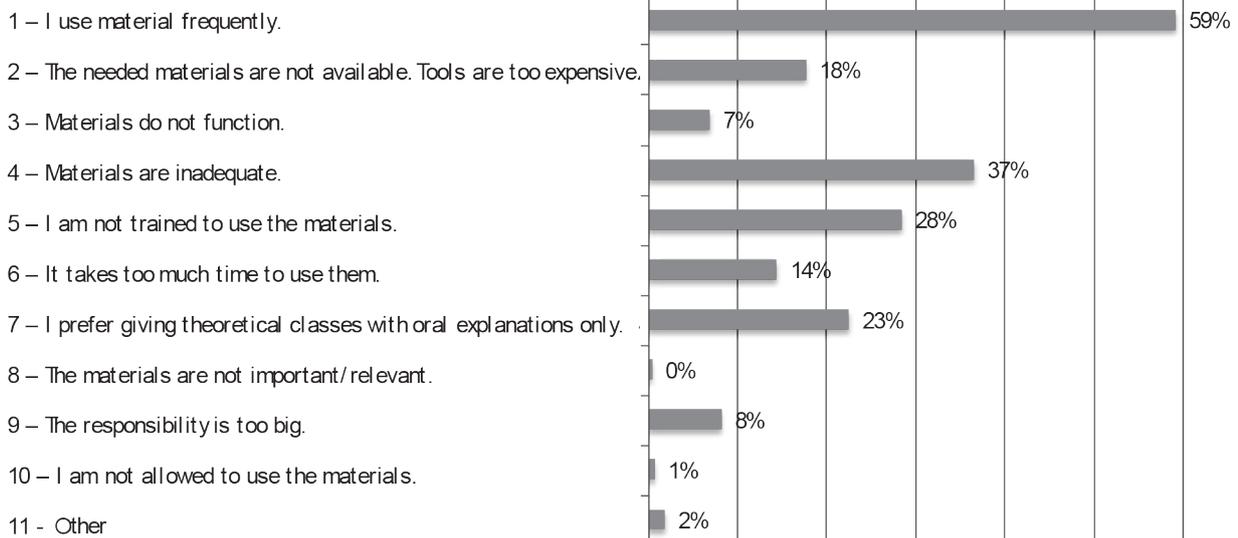


The teachers who stated that they do not or hardly use any teaching aids were asked about the reasons (Figure 16). 37% answered that they do not or seldom use the materials because they are inadequate or because teachers are not trained to use them (28%). Other reasons that hinder the usage of teaching materials are that the material is not

available, too expensive to use (18%) or not functioning (7%). Others prefer to teach without using these kind of aids and equipment in general (23%) or claim that the usage of teaching aids would take too much time (14%). Only some teachers mention that the responsibility would be too big (8%).

Figure 16: Reasons that hinder the usage of teaching aids and equipment.

Multiple answers were possible.

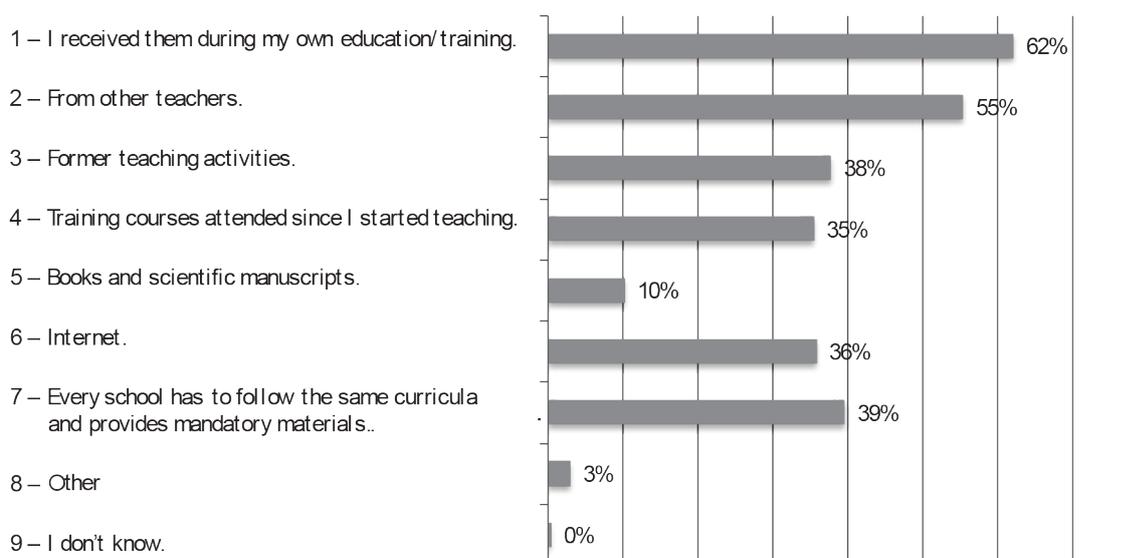


4.4.3 Written teaching material

It is interesting to see in Figure 17 where TVET teachers obtain written materials (like manuscripts, concepts) from. 39% of the teaching staff receive mandatory material from the institutions. Over 55% receive materials from colleagues and 62% state

that they use material that they gained from their prior education. It is remarkable that only 10% state that they receive their materials from books and scientific manuscripts. 36% of respondents answered they download written materials from the internet.

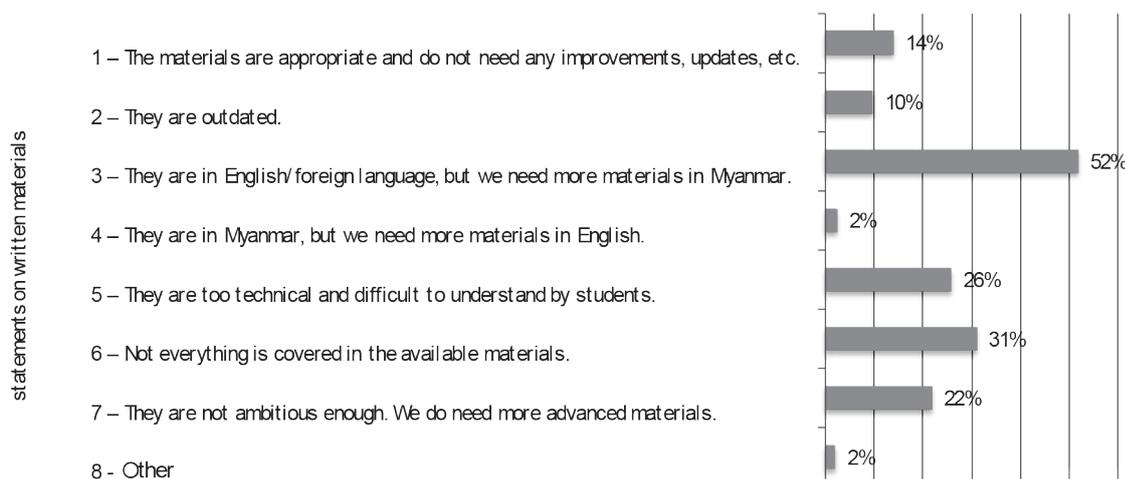
Figure 17: Sources of written teaching materials. Multiple answers were possible.



The participating teaching staff was asked to rate some statements concerning their confidence with the available written teaching material (Figure 18). Only 14% of the answers reflect confidence and claim that the materials are appropriate. Despite

this relatively low percentage, the numbers in the table below show high discontentment for multiple reasons, e.g. materials are not available in Myanmar language, they are outdated or not appropriate in terms of the students’ skill level.

Figure 18: Teachers’ statements on the available written teaching material. Multiple answers were possible.



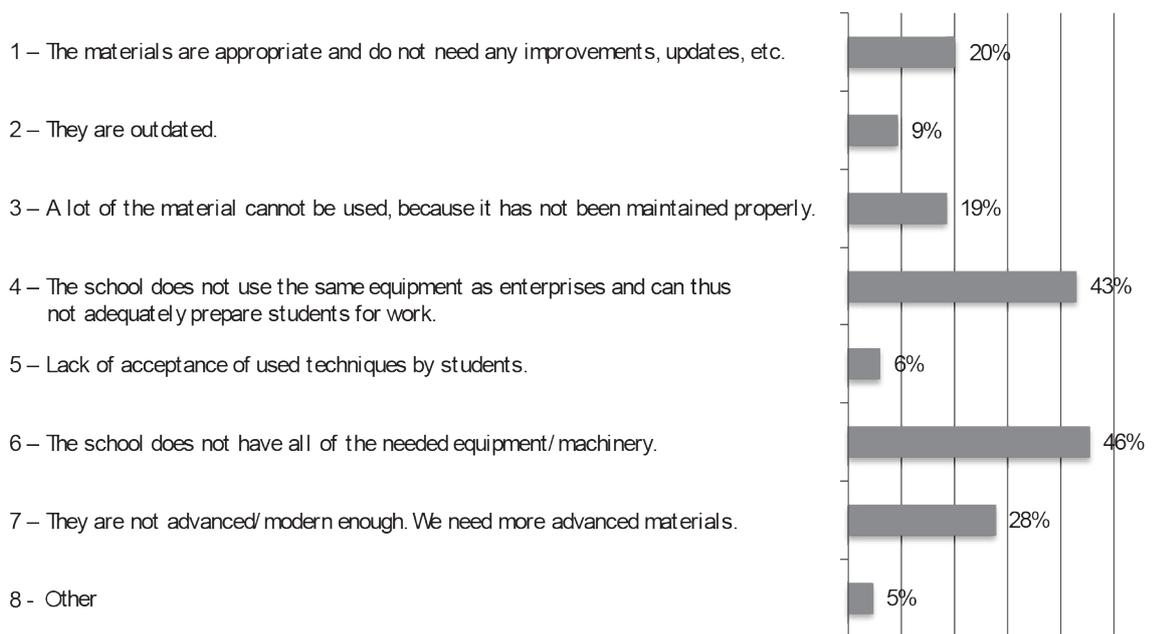
4.4.4 Teaching materials for practical teaching

The teachers were also asked to evaluate the equipment/machinery that they use in their practical trainings (Figure 19). The two main points are that the schools do not use the same equipment as the enterprises, so students cannot start their work directly after graduation.

Instead, they have to do additional trainings and do not have an advantage in the labor market in comparison to those who did not graduate from a TVET institute. Around 45% also state that the schools do not even have the needed equipment to teach and train practical classes adequately.

Figure 19: Statements on the equipment/machinery used in practical training.

Multiple answers were possible.

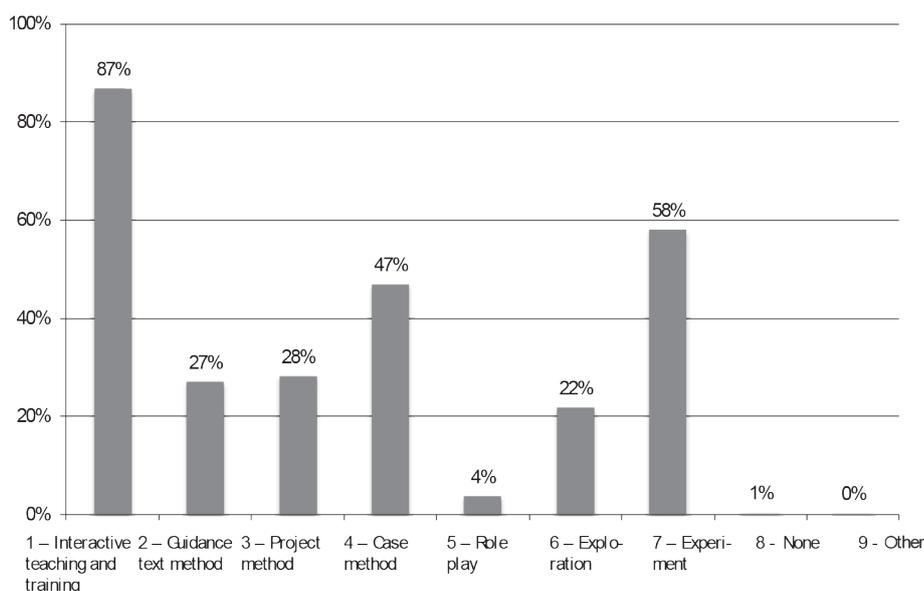


4.4.5 Teaching methods

Concerning bigger interventions (macro methods for teaching) in the scope of competency-based or action-oriented teaching mainly the ‘interactive teaching and training methods’ (87%) and ‘experiments’ (58%) are known among the

respondents. 47% of teachers know about the teaching method ‘case study’. Other rated methods were the ‘guidance text method’, ‘project method’ or ‘exploration method’, which can be seen in Figure 20.

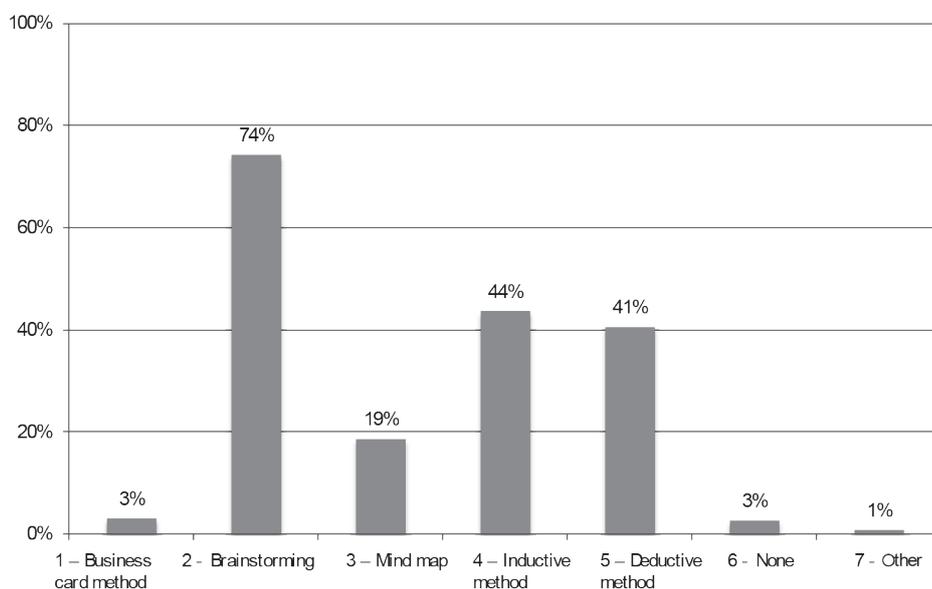
Figure 20: Knowledge about macro-methods of teaching. Multiple answers were possible.



Furthermore, the teachers were asked to rate their knowledge about smaller interventions (micro-methods) for student-centered teaching. Almost 75% of the teachers know the method of

brainstorming, other stated methods are mainly the ‘inductive’ and ‘deductive’ teaching methods (Figure 21).

Figure 21: Knowledge about micro-methods of teaching. Multiple answers were possible.



Results vary within the group comparison on knowledge about teaching methods among three groups: theory teachers, practical instructors and teachers who teach both theory and practice. Teachers, who teach both have the biggest

knowledge about teaching methods (1980 answers), teachers who teach theory stated in over 400 responses that they know teaching methods. Teachers who only teach practical lessons have very little or no knowledge about teaching

methods. According to the TVET teachers' ranking, the following list in Table 1 shows which macro- and micro-methods the teachers want

to learn more about in the future. The list starts from the most wanted teaching method and ends with the least wanted.

Table 1: Ranking of teaching methods the teachers want to learn more about in the future.

Ranking	Methods the teachers want to learn more about in the future:	Number of answers	Category
1 – most important	experiment	436	macro-method
2	interactive teaching and training methods	210	macro-method
3	brainstorming, mind map	124	micro-method
4	all methods	102	macro- and micro-methods
5	exploration method	88	macro-method
6	project method	68	macro-method
7	deductive method	65	micro-method
8	inductive method	38	micro-method
9 – least important	case study	29	macro-method

Within an open-text question, teachers had to mention their knowledge about skills standards. The majority (almost 80%) of the TVET teachers have never heard about skills standards before. From the 20% of teachers stating

that they heard about skills standards before, the answers could be clustered in five categories. The number of teachers, who mentioned an answer from this category is reflected in Table 2 below.

Table 2: Perception of skills standards by teachers.

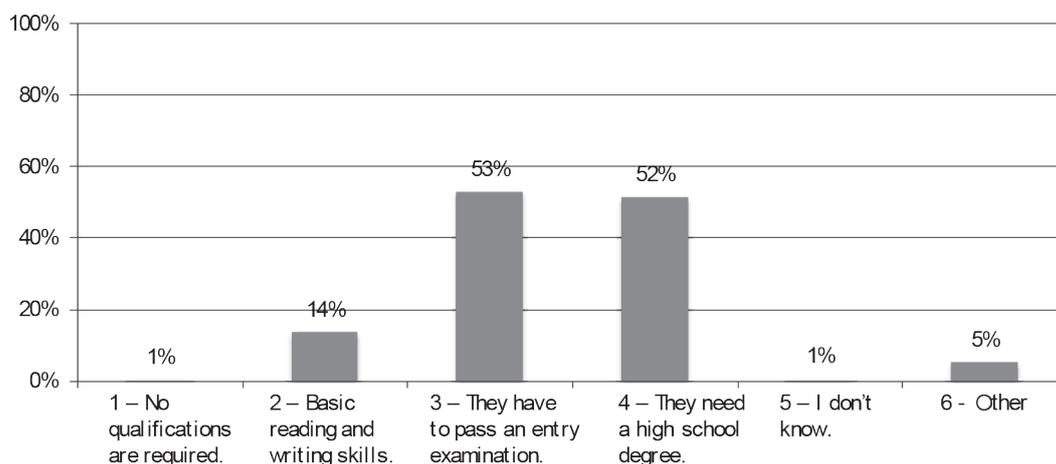
Category		No. of answers
1	Responsibility NSSA/ASEAN	6
2	Standards are a practical or theory test	22
3	Standards define certain knowledge	8
4	Standards help to identify levels	6
5	Standards define who can work perfectly	8

4.5 Students

The teachers were also asked about the qualifications that students need for admission to a TVET training program at their school.

In most cases, the students need to pass an entry examination (53%) and/or need to prove a high school degree (52%).

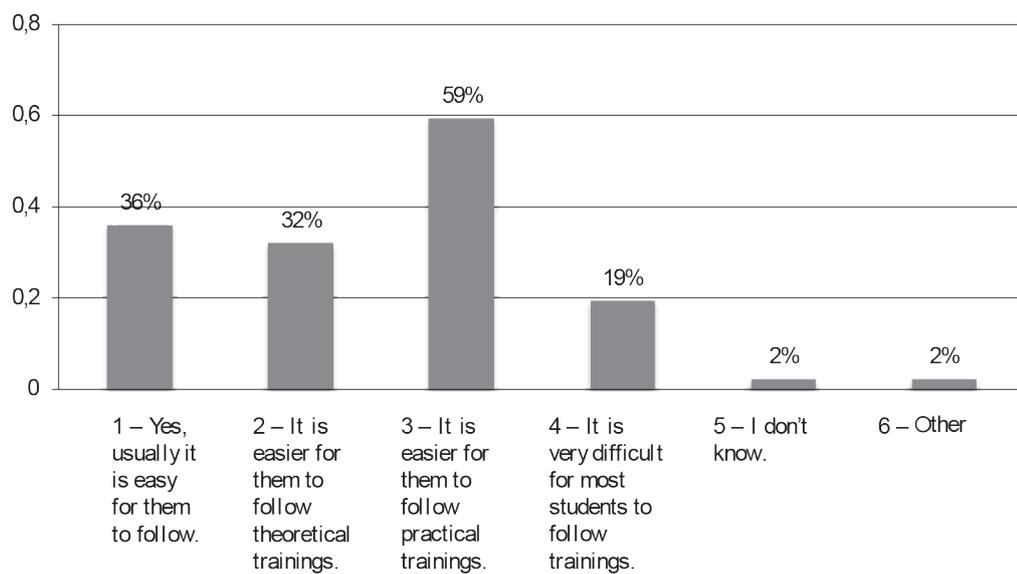
Figure 22: Entry qualifications for students in vocational schools. Multiple answers were possible.



Nearly 40% of the teachers state that these required qualifications are inadequate and should be modified. Furthermore, the teaching staff was asked if students are able to follow the training and the instructions during their classes. The illustration in Figure 23 shows that it is easier for most students to follow practical

trainings (59%), whereas 32% of the teachers judge that it is easier for their students to follow theoretical trainings. Additional 36% of the teaching staff estimate that their lessons are easily followed in general, 19% of the students are perceived as having difficulties in following the teaching contents.

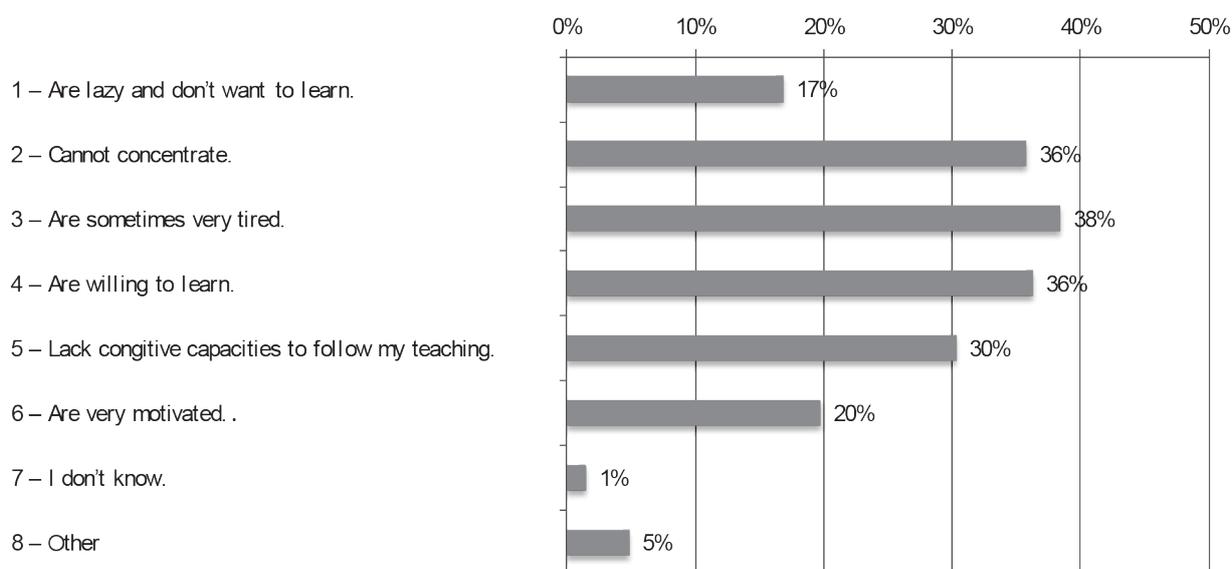
Figure 23: Teachers perception of students' comprehensibility of lessons.
Multiple answers were possible.



In addition to the comprehensibility of lessons, the teachers were supposed to rate their students' attitude within the survey. The following Figure 24 shows that students are judged to show negative attitudes and are perceived as 'sometimes very tired' (38%), 'lazy and don't want to learn' (17%)

or 'cannot concentrate' (36%) and even more, they lack 'cognitive capacities to follow the teaching' in 30% of all answers. 36% of the teachers experience their students' attitude as positive and answer that the students are 'willing to learn' and another 20% experience students to be 'very motivated'.

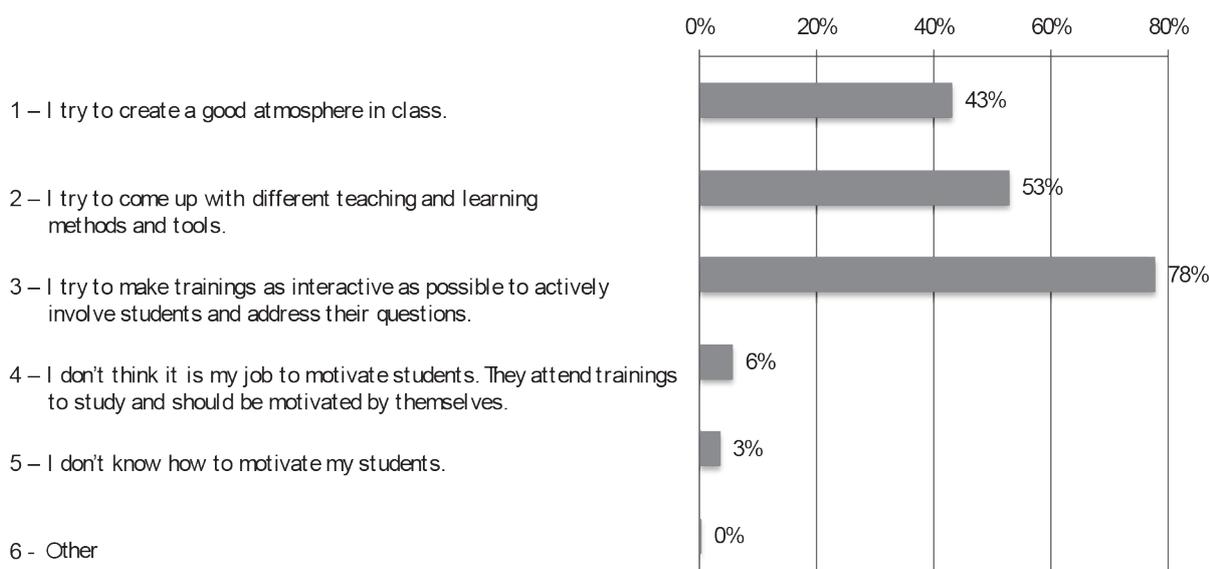
Figure 24: Students’ attitude towards learning. Multiple answers were possible.



The teaching staff was asked to mention which strategy they use in order to motivate their students. A majority of 78% stated that they try to use interaction and to include the students in order to overcome demotivation. Another 53% of the answers go in line with this – teachers mention the use of teaching and learning methods for enhancing

their students’ learning motivation. 43% of the respondents claimed to create a good atmosphere in the classroom. Only few respondents answered in a negative sense, e.g. that they would not know what to do or they would not think motivating students is their responsibility.

Figure 25: Teachers ideas how to motivate students. Multiple answers were possible.



5 Discussion on the main findings and recommendations

Several key results stand out. Therefore, chapter 5.1 shows the main results concerning general information on teachers' background and current employment situation.

5.1 General information on teachers' background & current employment situation

Among the respondents, 80% of the participating TVET teachers are female. In general, this result goes in line with other reports mentioning that women play an important role with the burden of the domestic management on the one hand, but equal access to school education on the other hand. A reason for this distribution might be that the teacher can have the secure income although it is not sufficient for the family. Moreover, a job as a teacher is one of the respectable careers for women in Myanmar society.

While in general 80% of the respondents are female, a different distribution of gender can be seen at schools of the Ministry of Industry. In the MoI schools 55% of the teaching staff are female and 45% are male. Further research should keep an eye on the question whether this gender distribution is changing along with the change of the learning culture in Myanmar. Especially when in the future staff appraisals practical knowledge weighs more than before.

The results concerning the educational background of TVET teachers show that an academic technical path is the common background (90%) for the assignment as a vocational teacher. In addition to the mostly academic educational background, 26% of TVET school teachers come from other teaching areas. Furthermore, the survey reveals that

The findings on skills and training needs are discussed within chapter 5.2, the teaching conditions at schools in chapter 5.3 and the outcomes on the target group of students in chapter 5.4.

there is a vast gap in practical experience among the teaching staff and that the majority of TVET teachers have never worked in a company. Only 6% had the possibility to gain real life work experience in the private sector. Obviously, there is a tremendous need for overcoming this big omission. In its National Education Strategic Plan (NESP 2016-2021), the Ministry of Education clearly states that the orientation on labor market's needs is the goal of highest priority. Compared with the survey's results, this goal seems to be hard to reach. How can the teaching staff prepare their students for the new requirements when they themselves never experienced any real workplace-life? The results of the teacher survey outline a strong need for action in this aspect.

As the first step, there could be a stable cooperation with the private sector and industry developed, in order to connect vocational training to the labour market demand and vice versa, to show the companies the benefit of a connected and up-to-date vocational training for future skilled employees.

As the second step, practical working experience should become an irrevocable part of a structured and standardized pre-service teacher training. This could be in form of internships and on-the-job training for teaching staff.

Only vocational teachers, who have an understanding about the employers expectation can adequately support the students' preparation for the world of work. In this context it is also of key relevance to enhance the quality and the practical orientation in TVET schools to simulate workplaces within the industry. Schools' practical workshops need to be set up as realistic as possible and according to the companies' standards. In line with this, teaching and learning should assemble working examples, e.g. through teaching contents by using real work examples and cases. In this regard, schools from all ministries can profit from the efforts of the National Skills Standards Authority (NSSA) led by the Ministry of Labor, Immigration and Population in Myanmar. As the NSSA sets Occupational Standards, school management can get a clear view on what a skilled

5.2 Skills and training needs

The teacher survey's findings indicate that training quality within teachers (pre-service and in-service training) needs improvement. The majority of teachers (70%) can only use little of the skills and knowledge gathered through their (vocational) education and through prior assignments – this certainly points out that quality in teachers' education has to be improved. Additionally, 13% of the respondents claimed that they do not use any of the prior gained skills and knowledge. According to this result, teachers have a high demand for further training and practical skills – and/or they have a high demand for adequate pre-service training, which matches with the affordances of the teacher's assigned tasks. Therefore, the outcome underlines two aspects:

employee must be capable of in the respective trades and which sets of skills must be provided by the TVET schools. In a further step, the teaching staff could be trained and assessed according to these standards to be prepared for the labour market-oriented teaching style. There are already several examples of the best practice throughout the country at the newly set up NSSA testing centers for several occupations such as Machinist or Welder. As the survey shows, 75% of the teachers are responsible for both theory and practical lessons, which means that there is no strict separation of theory and practice in most of the schools. In order to optimize the teaching and learning environment, it is advisable to enable the close cooperation between theory and practical teaching staff. Teaming up for class preparation or projects will improve the students learning capacities.

either teachers are not trained enough yet or they are not adequately trained to professionally meet the requirements of their role as teachers. One recommendation is to empower the job as a TVET teacher as an acknowledged and respected occupation that inherits a clear profile of both, technical and methodological teaching skills. Only when teaching is seen as an occupation with specific competencies ingrained in this profession (skills, knowledge and attitudes), this can foster adequate education of teachers as this would give orientation and guidelines on what a professional teacher should know. A further aspect is that it would be beneficial to include the possibility to gain practical experiences of teaching during a pre-service or in-service teacher

training to better adapt to the new role as teacher. 85% of the teachers stated that they have already participated in further trainings mainly aiming at improving their practical skills and knowledge and the application and demonstration of machinery and equipment, followed by trainings in the field of teaching theory.

The results show that it is quite common for teachers to participate in further trainings. But the fact that teachers still do not feel sufficiently prepared for their tasks indicates that the intended outcomes of the training are not reached. Training offers for teachers need to be provided more frequently or should be better adjusted and have a clear focus on practical skills related to the machines/ tools available at their respective schools.

Moreover, they need to focus on the real and previously analyzed needs of the teachers. Training offers also have to be in line with the teachers' assigned tasks and responsibilities in the respective TVET school. That might lead to the development of customized teachers training plans and a strategic Human Resource Management at TVET schools.

The teacher survey illustrates a big variety of training providers, including private providers, training by donor organizations or training abroad. The majority of teachers are trained by offers through one of the ministries (MoE, MoI) and their respective TVET institutions. This variety also implies the difficulty of coordination. The training providers are not necessarily connected and therefore, trainings lack a centralized matching. There is no common structure of planning, performing and evaluating

teacher training offers in the vocational field. This structure is strongly needed to align training offers to better match education with real training needs. Together with the teachers' statement of interest in further training offers (93% agree on further training) this reflects a generally positive attitude towards teacher training. Furthermore, the fact that 40% of the respondents stated they are interested in topics of further education and have willingly applied for these kinds of trainings shows a positive disposition. This is important to know and can be used as a motivational aspect for teachers' competency development.

For example, teacher training can be utilized as a reward for other achievements in the field of teaching and school management. It is interesting for further planning of teachers training to keep their perception of training needs into account. The biggest gap and, therefore, the highest training need is seen among the teaching staff in the practical field of teaching (almost 84%) and also in the practical application and demonstration of machines and equipment (almost 70%).

These two biggest gaps underline the necessity of practical skills training in order to train the teachers in using the machines and tools provided at their schools. Other highly rated topics are the need for further training on theory teaching skills (55%) and teaching and learning methodology (55%).

In general, the respondents chose multiple answers in the question concerning training needs. This also underlines a big demand and an open attitude towards further training offers.

In general, the teacher survey reflects not only the need for further training, but also an additional demand for a goal-oriented and powerful human resource management, especially for the management of the teacher training. The management is in charge of setting up further and specified needs analysis and for developing and coordinating

5.3 Teaching conditions at schools

It is of profound importance that almost 95% of teaching staff claims to have a curriculum for their trade. But half of these respondents admitted that they only understand parts of this curriculum or even do not see any benefits or purpose for their daily work in the curriculum. This outlines a general problem that lies within the implementation process of the transformation towards labor-market-oriented vocational training. Many activities and steps have been already taken, e.g. the modernization of curricula and the development of lesson plans in order to standardize and optimize the conditions in the field of vocational education.

But the sustainable implementation and the transfer of new ideas takes long time. Additional efforts (e.g. internships and mentoring structures) could be taken into account to enhance this transfer. In addition to the widespread existence of curricula, 87% of the teachers received or even created (18%) a syllabus at their TVET institution. This result shows that school management and teachers are quite aware and open-minded towards the usage of structuring tools from the field of quality and classroom management. A brief account on the usage of teaching aids shows that the application of boards (chalkboards and blackboards, approx. 60%) and the use of machinery and technical equipment for practical lessons (65%) is common among teachers. However, projector and screens are little used.

target-group-related training offers. It is of utmost importance in the long-run to enhance pre-service teaching in a way that practical skills become a pre-requisite before anyone can even join university to become a TVET teacher. It is also important to have adequate practical skills training for pre- and in-service teacher training measures.

It seems in most cases that the traditional teaching style with an active teacher or instructor and a passive student, who is listening to the contents presented on a board or textbook, is still the reality throughout the vocational training. One benefit for the improvement of training conditions and quality could derive from networking, sharing good practices and close cooperation among TVET schools. The newly established school network of 6 selected TVET schools, supported by GIZ TVET (GIZ, TVET 2017: Action Area 4, Development of a TVET school network) could function as an example for this recommendation. Enhancing the exchange among the teaching staff either school internally or among TVET schools, e.g. on different teaching aids and their usage for lessons, is certainly beneficial. In this case, teachers would have the possibility to receive practical examples from other teachers, which could help broaden the knowledge on the usage of teaching aids combined with specific examples from other teachers or trades. The teacher survey reveals two main obstacles concerning the usage of teaching aids, i.e. not being trained on the usage of a certain material or not having the access to adequate training aids. A teacher who is open to networking and exchange is more likely to successfully overcome difficulties like these.

The need for improvement remains not only in the establishment of a better usage of teaching aids, but also in the development and the better and adequate usage of written teaching material (e.g. textbooks). The main sources of written teaching aids come from teachers' prior education on the one hand and other colleagues on the other hand. Teachers mention that the material they use is outdated or not matching with the students' (intended) skills and that the material does not cover the learning contents. Therefore, it is emphasized and strongly recommended to orientate on the existing curricula and to develop material according to and in line with occupational standards (NSSA) and labor market-oriented curricula.

A further big obstacle is that good and up-to-date material is mostly only available in English language and not in Myanmar language. This language problem could easily be addressed with exchanging already translated material – the above mentioned networking could support this. In terms of practical teaching aids, teaching staff regrets that many schools do not have appropriate teaching aids for practical training at all (46%) and that material is often outdated,

5.4 Students

Empowering students and thus, training skilled workers for companies and the private sector is the teachers' main task in vocational education and training. To adequately support teachers in this task, it is important to know their perception of students' abilities and attitudes. When asked about their evaluation of the students' lesson comprehensibility, many teachers (60%) answered that it is easier for their students to follow practical

broken, not advanced and modern enough. Another stated aspect is that the available material does not match with the material used in real workplaces, so that students are not adequately trained and the gap between school and the labor market cannot be diminished. Some of these aspects could be handled better by implementing a clear maintenance system in the schools' workshops in order to avoid broken and unused material. Maybe then some of the material could be reused. By monitoring the teachers' knowledge on teaching methods, the survey reveals that the majority of teachers know about quite a variety of teaching methods in both categories, i.e. macro-methods (experiment) and micro-methods (e.g. brainstorming). Further studies should research in detail if teachers also use these methods in their lessons.

It is interesting to see that, within the group comparison, teachers who are responsible for both theory and practice have big knowledge of teaching methods, whereas teachers who exclusively teach practical lessons have little or no such knowledge. Further training could focus directly on this issue by providing capacities on the usage of teaching methods for practical lessons in the workshops.

lessons compared to 30% who said students follow theoretical lessons more easily and another 35% who answered that both are easy for them. The results show that from the teachers' perspective, comprehensibility of learning contents seems to be no obstacle for the majority of students. Nevertheless, most of the learning material is in English language, which might be challenging for teachers and students. However, teachers mention problems

with their students' attitude and learning motivation. 35% of the answers in the different categories mention that students are willing to learn and another 20% perceive their students to be motivated. But there is also the majority of teachers who perceive their students' attitude as negative in the sense of being lazy, not concentrated and unwilling to learn. This feedback implies that teachers have a certain expectation towards their students – and this expectation is very low or even negative. This could cause difficulties and shows a high demand for further research to find out why this negative attitude is nurtured. If teachers already assume their students to be unwilling, this may result in a self-fulfilling prophecy and students might not obtain a real chance to develop from the beginning. In this scope, a demand for further interventions, like mentoring and training, is strongly recommended. If teachers gain more self-confidence e.g. on critical thinking, self-evaluation and reflection on their own teaching, this perception could be overcome. One component for further activities could also be trainings for students to strengthen their soft skills, like learning motivation

and study skills (e.g. learning techniques, self-organization skills, communication, teamwork). This could help promote students to become an active part of the newly implemented interactive teaching mode.

Parts of this negative attitude (might) also derive from inadequate teaching and might be rooted in mismatching equipment, old lesson materials and teaching aids or even from an inappropriate teaching style. With reflecting on these causalities, teachers have a chance to detect and bridge their gaps. It is a good sign that most teachers stated that they have already tried to use interactive teaching in order to create a good atmosphere and to overcome demotivation and disappointment.

These results show that there is an understanding and a general knowledge on how to address the challenges. These positive results can be seen as a success of the so far taken measures like teacher trainings and baseline studies. But competencies in classroom management and teaching methodology are still lacking and need further improvement.

6 Conclusion

The results of the teacher survey show that in the context of teacher training there is a general openness, which can be used for a fruitful cooperation. From the school management side, many activities and measures to restructure and improve teaching and learning have already been taken into account and used throughout the TVET schools. But the results show a gap between ideas, efforts and the actual outcome and benefit for the students. Given the difficulty to run the targeted transformation processes, the ministries have to apply joint efforts together with teachers, school management and also the involved donors and non-governmental activities. In a longer term, it is therefore the core objective to develop a more complex picture of teacher training and more systematic approaches and solutions. The following five conclusions could be drawn.

Firstly, the findings of the teacher survey indicate that there is a potential risk of lacking sustainability in all the efforts taken so far as the training and teaching conditions seem to be very diverse and the training needs high. According to these results, it is strongly recommended to keep the path of standardizing pre-service and in-service teacher education. It is recommended for teachers to not only be trained by isolated (short-term) trainings, but to receive a profound and holistic education for the profession of a teacher. This education should include technical training, as well as training on classroom preparation, quality and maintenance issues, administration and teaching methodology.

Secondly, the role of the ministry must be to further establish and institutionalize stable conditions for pre-service and in-service teacher training and the further education of teaching staff, e.g. by promoting a consistent structure and an institutional framework (e.g. by establishing a nationwide center for teacher education or by strengthening a decentralized structure of training centers) for the education of teachers. Only if teachers receive reliable education in practical technical skills, as well as in the field of teaching skills, they can reach the goal of offering quality vocational training to their students. The lack of practical (technical) skills shall be overcome in a way that the teachers need to be equipped with (basic) practical skills training in order to understand and use and didactics of (at least) the machines provided/ present at their schools.

Thirdly, many of the findings highlight that, on the school level, there is a high need for exchange and networking in order to optimize access to teaching and training aids and to teaching and learning materials like media presentations, adapted textbooks in Myanmar language and lesson plans. Exchange of material, but also of ideas concerning the role of technical teachers, could empower the capacity building of teaching staff and encourage teachers to join the shift from teacher-centered to student-centered education. School managements should take a lead in establishing these networking structure inside their schools and also with other schools and organizations, but the ministries have to initiate and empower this process.

Fourthly, the promotion of structures for mentoring and coaching at the school level has to be emphasized. This mentoring could be fostered and supported by experts for specific topics, who work together with the teachers and share their lessons learned and best practice examples, e.g. after a training phase. When working together with a mentor or coach, teachers have the chance to really implement and transfer the contents they learned in a certain training.

Fifthly, a teacher training set-up for vocational teachers in Myanmar must include practical experience at work. Solely constant cooperation with the private sector could enhance training quality and, therefore, could match lessons in vocational schools with the dynamics of the labor market.

Efforts should be taken to develop cooperation with companies and the private sector and to interface with existing projects on these cooperation. Otherwise, there is a potential risk of missing the intended education of skilled workers that meets the dynamic requirements of a fast and ever-changing workplace.

Practical skills for TVET teachers seem to be the first priority as a measure of capacity development. Only then, teachers are able to pass on the technical skills and knowledge. The transformation of vocational education towards a high quality and demand-oriented training requires the support of all stakeholders to guarantee the fully sustainable and operational capacity development of Myanmar TVET teachers.

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7.3 List of acronyms

DEval	German Institute for Development Evaluation
DTVET	Department of Technical and Vocational Education and Training
GIZ	Gesellschaft für Internationale Zusammenarbeit GmbH
GTI	Government Technical Institute
GTHS	Government Technical High School
ITC	Industrial Training Center
MoE	Ministry of Education
MoI	Ministry of Industry
NESP	National Education Strategic Plan
NSSA	National Skills Standards Authority
TPTC	Technical Promotion Training Center
TVET	Technical and Vocational Education and Training

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7.5 Further Attachments

7.5.1 Sample of the Questionnaire



Teacher Survey Myanmar

Legend:

Please circle only one answer for each question, unless the question requires some form of written response or indicates that multiple answers are possible.

_____ Please enter text or number answers on the indicated line.

Italic: Explanations to respondent

INTRODUCTION

Since October 2012, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH implements three projects for sustainable economic development in Myanmar on behalf of the German government: private sector development, banking and finance and technical and vocational training (TVET).

The overall purpose of the TVET interventions is to support the Ministry of Education and other line ministries in the reform process of the TVET sector towards a labor market oriented system that produces well qualified graduates for the private sector.

One of the main activity areas of the intervention is focusing on the improved capacities and training of teachers working in TVET. In this context, it is of great importance for GIZ and the Ministry of Education to learn as much as possible about the teacher's current situation and their teaching needs. The more we know about the current status, the easier it will be to adjust the interventions to the biggest needs and to foster an effective intervention. Because of this, we would be very glad if you filled in this questionnaire openly and honestly. Answering the questionnaire will take approximately 20 minutes. Your answers will be treated confidential and this is why we do not need to know your name. Please answer all questions, since this is not a test it is completely fine to answer "I don't know" where appropriate, but do not skip any question. We are interested in your personal opinion, so please fill out the questionnaire without discussing it with others. After completing the questionnaire, please bring it to the responsible person, from whom you also received it.

All data will be treated strictly confidential.

Questionnaire ID:
GENERAL QUESTIONS, EDUCATIONAL BACKGROUND AND PRIOR WORK EXPERIENCE

1. What is your gender?

1	Male
2	Female

2. Where do you work at the moment?

1	Industrial Training Center (ITC)	5	Teacher Training Institute
2	Technical School (GTI, GTHS, GTC)	6	Without permanent employment (freelance, private teacher)
3	University or Technical University	7	Other. Please specify: _____
4	Private Training Institute		

3. What is your educational background?

Multiple answers possible. Please circle all degrees that you have completed.

1	Bachelor of Arts in Education	5	PhD
2	Bachelor of Science in Engineering	6	Any extra degree/certificate in teaching
3	Master of Arts in Education	7	TVET Certificate (from any govern-mental or private TVET institution)
4	Master of Science in Engineering	8	Other. Please specify: _____

4. Where did you complete your education?

Multiple answers possible. Please circle all correct answers.

1	University or Technical University in Myanmar	5	GTHS, GTI or GTC
2	University or Technical University in Asia	6	ITC
3	University or Technical University in US or Europe	7	Other. Please specify: _____
4	University or Technical University elsewhere		

CURRENT EMPLOYMENT

5. When did you receive your last degree or certificate? _____ (Year)

6. Where did you work prior to this employment?

Multiple answers possible. Please circle all correct answers.

1	No prior employment. This is my first appointment since graduation.	5	Another Technical School in Myanmar
2	Public authority or ministry	6	I worked as a teacher abroad
3	Another University or Technical University	7	Private enterprise/industry
4	Another Industrial Training Center (ITC)	8	Other. Please specify: _____

Questionnaire ID:

7. What is your current position in this school/training institution?

1	Principal
2	Vice-Principal
3	Head of Department. Which department? _____
4	Teacher. Which subject? _____
5	Instructor. What for? _____
6	Other: please specify _____

8. When did you start working in your current position? _____(month/year)

9. In which trade are you engaged (main subject)? _____

10. Which trade did you learn/study? _____

11. What is your main field of teaching?

1	Theory
2	Practice
3	Theory and practice

12. Are you employed as a full-time or part-time teacher?

1	Full-time
2	Part-time

13. How many hours a week do you teach? _____hours

14. How many hours a week do you spend on preparing classes, teaching material, etc.?
_____hours

15. How many hours a week do you spend on administrative work? _____hours

16. Do you have other assignments/jobs besides your job as teacher/instructor, etc. at school?

If no, continue with question 17 please.

1	Yes
2	No

17. How many hours a week do you do you allot for that other job? _____hours

Questionnaire ID:
SKILLS AND TRAINING NEEDS

18. How much of the knowledge and skills that you have acquired during your education and trainings are relevant for your current employment?

Please encircle the most appropriate answer.

Not at all	Only some	Most	Everything
1	2	3	4

19. Please rate your skill level in the following areas by selecting the response option from Very low (1) to Very high (10) that most closely reflects your skill level. Choose I don't know (11) if you are unable to rate your skill in a given area or if that skill is not used in your field.

Please circle the most appropriate answer for every aspect.

	1 - Very low									10 - Very high	11 - I don't know
a. Teaching skills in theory	1	2	3	4	5	6	7	8	9	10	11
b. Teaching skills in practice	1	2	3	4	5	6	7	8	9	10	11
c. Knowledge in handling administrative and organizational tasks	1	2	3	4	5	6	7	8	9	10	11
d. Preparing classes and exams	1	2	3	4	5	6	7	8	9	10	11
e. Teaching and learning methodology	1	2	3	4	5	6	7	8	9	10	11
f. Application and demonstration of machinery and equipment	1	2	3	4	5	6	7	8	9	10	11

20. Did you attend any training since the beginning of your work as a teacher?

If no, please continue with question 25.

1	Yes
2	No

21. On which subject(s)?

Multiple answers possible. Please circle all correct answers.

1	Teaching skills in theory
2	Teaching skills in practice
3	Knowledge in handling administrative and organizational tasks
4	Preparing classes and exams
5	Teaching and learning methodology
6	Application and demonstration of machinery and equipment
7	Other: please specify _____

Questionnaire ID:

22. How many trainings related to teaching did you attend in total? _____

23. What was the average length of your training(s)? _____ (no of days)

24. Why did you attend the training(s)?

Multiple answers possible. Please circle all correct answers.

1	I was chosen by the school to attend the training.
2	I applied for the training because I wanted to learn something new.
3	Just for fun. Anyone who was interested could attend.
4	Other: please specify _____
5	I don't know.

25. Which training provider offered the training(s)?

Multiple answers possible. Please circle all correct answers.

1	Teacher Training Center under MoE in Baelin
2	Teacher Training Center under another Ministry
3	Private Training Provider
4	Training abroad
5	Training provided through a donor
6	Training organized by my TVET institution/ workplace
7	Other: please specify _____
8	I don't know.

26. Would you like to attend trainings in the future?

If no, please continue with question 28.

1	Yes
2	No

27. In which field would you like to attend trainings?

Multiple answers possible. Please circle all correct answers.

1	Teaching skills in theory
2	Teaching skills in practice
3	Knowledge in handling administrative and organizational tasks
4	Preparing classes and exams
5	Teaching and learning methodology
6	Application and demonstration of machinery and equipment
7	Other: please specify _____
8	I don't know.

Questionnaire ID:

28. If you have the chance to attend a training. Where would you prefer to attend?

1	In my TVET institution.
2	In any training institute within Myanmar
3	Abroad.
4	I do not have any preference. Any place would be suitable for me.
5	Other: please specify _____

29. Did you ever ask or volunteer to attend a training were not allowed to attend?

If no, please continue with question 30.

1	Yes
2	No

30. Do you know the reasons? Multiple answers possible.

Please circle all correct answers.

1	I don't know why I was not chosen.
2	Someone else was allowed to attend instead.
3	My school did not have sufficient funding to send me to the training.
4	There was no training program on the subject I was interested in.
5	Other: please specify _____

TEACHING CONDITIONS AT SCHOOL, CURRICULUM, LEARNING MATERIALS

31. Do you have a curriculum of the trade you teach?

If no, please continue with question 32.

1	Yes, a curriculum is given to me by the principal / by _____
2	No

32. Please indicate which of the following statements regarding the received curriculum is the most appropriate:

1	I have read the curriculum and I fully understood its contents.
2	I have read the curriculum but I only partly understood it.
3	I know the curriculum, but it has no relevance for my daily teaching work.
4	I know the curriculum, but I don't know what to do with it.

33. Do you have a syllabus that you follow in your teaching?

If no, please continue with question 34.

1	Yes
2	No

Questionnaire ID:

34. Please indicate which of the following statements regarding the received syllabus is the most appropriate:

1	The syllabus was given to me or copied from my colleague.
2	I developed the syllabus according to my experience.
3	I developed the syllabus along the curriculum and according to my experience.
4	The syllabus has no practical relevance to my teaching.
5	Other: please specify _____

35. In case you have questions related to your teaching and your trainings. What do you do?

Multiple answers possible.

1	I ask my colleagues. They are very helpful.
2	I want to ask my colleagues, but they do not have much time.
3	I ask the principal for help.
4	I am looking for help in the internet.
5	I try to solve the questions by myself.
6	Other: please specify _____
7	I don't know.

36. Which training aids and equipment do you regularly use in your class and/or workshop?

Multiple answers possible. Please circle all correct answers.

1	Chalk and black board
2	Projector
3	Machinery/technical equipment for practical training
4	Other: please specify _____
5	None

37. If you do not or seldom use any materials, please specify why.

Multiple answers possible. Please circle all correct answers.

1	I do use material frequently.
2	The needed materials are not available. Tools are too expensive
3	Materials are not functioning.
4	Materials are inadequate.
5	I am not trained to use the materials
6	It takes too much time to use them.
7	I prefer giving theoretical classes with oral explanations only
8	The materials are not important/relevant.
9	The responsibility is too big.
10	I am not allowed to use the materials.
11	Other: please specify _____

Questionnaire ID:

38. Where do you usually get your written materials (like manuscripts, concepts) from?
Multiple answers possible. Please circle all correct answers.

1	I received them during my own education/ training.
2	From other teachers
3	Former teaching activities
4	Training courses attended since I started teaching
5	Books and scientific manuscripts.
6	Internet
7	Every school has to follow the same curricula and provides mandatory materials.
8	Other: please specify _____
9	I don't know.

39. Which of the following statements applies to the written materials that you use during your training? Multiple answers possible. Please circle all correct answers.

1	The materials are appropriate and do not need any improvements, updates, etc.
2	They are outdated.
3	They are in English/ foreign language, but we need more materials in Myanmar.
4	They are in Myanmar, but we need more materials in English.
5	They are too technical and difficult to understand by students.
6	Not everything is covered in the available materials.
7	They are not ambitious enough. We do need more advanced materials.
8	Other: please specify _____

40. Which of the following statements applies to the equipment/machinery that you use in your practical training?

1	The materials are appropriate and do not need any improvements, updates, etc.
2	They are outdated.
3	A lot of the material cannot be used, because it has not been maintained properly.
4	The school does not use the same equipment as enterprises and can thus not adequately prepare students for work.
5	Lack of acceptance of used techniques by students.
6	The school does not have all of the needed equipment/machinery.
7	They are not advanced/modern enough. We do need more advanced materials.
8	Other: please specify _____

Questionnaire ID:

41. Which teaching and training methods are you familiar with?
Multiple answers possible. Please circle all correct answers.

1	Interactive teaching and training.
2	Guidance text method.
3	Project method.
4	Case method.
5	Role play.
6	Exploration.
7	Experiment
8	None
9	Other: please specify _____

42. Which teaching and trainings tools / methods are familiar to you?
Multiple answers possible. Please circle all correct answers.

1	Business card method
2	Brainstorming
3	Mind map
4	Inductive method
5	Deductive method
6	None
7	Other: please specify _____

43. Which of these tools/ methods (see question 41) do you regularly use in your teaching and training?

44. Which tools and methods would you like to learn more about?

Questionnaire ID:

45. Which of the following statements do you agree with?
Please circle the most appropriate answer for each statement.

	1 – Completely disagree 2 – Somewhat disagree 3 – Somewhat agree 4 – Completely agree 5 – I don't know				
a. A TVET certificate (from any governmental or private TVET institution) will definitely increase graduates' competitiveness on the labor market.	1	2	3	4	5
b. The TVET system in Myanmar does not have enough sufficiently qualified and committed teachers because the job is unattractive (because of salary and little prestige).	1	2	3	4	5
c. If I could choose again I would become a TVET teacher again.	1	2	3	4	5
d. The courses at my school provide the practical skills and technical expertise needed to work in the industry or private sector.	1	2	3	4	5
e. There is good cooperation between the school and private sector / industry	1	2	3	4	5
f. The school needs overall maintenance (building, equipment and curricula)	1	2	3	4	5

46. Have you heard about "skills standards"?

1	Yes: Please specify shortly, what you have heard about "skills standards"?
2	No

STUDENTS

47. What kind of qualification do students need for admission to a TVET training program at your school?

1	No qualifications are required.
2	Basic reading and writing skills.
3	They have to pass an entry examination.
4	They need a high school degree.
5	I don't know.
6	Other: please specify _____

48. Do you think the qualifications required for admission are adequate?

1	Yes
2	No
3	I don't know.

Questionnaire ID:

49. Are students able to follow the training?

Multiple answers possible.

1	Yes, usually it is easy for them to follow.
2	It is easier for them to follow theoretical trainings.
3	It is easier for them to follow practical trainings.
4	It is very difficult for most students to follow trainings.
5	I don't know.
6	Other: please specify _____

50. How do you motivate your students?

Multiple answers possible.

1	I try to create a good atmosphere in class.
2	I try to come up with different teaching and learning methods and tools.
3	I try to make trainings as interactive as possible to actively involve students and address their questions.
4	I do not think it is my job to motivate students. They attend trainings to study and should be motivated by themselves.
5	I don't know how to motivate my students.
6	Other: please specify _____

51. From my point of view: My students...

Multiple answers possible.

1	Are lazy and don't want to learn.
2	Cannot concentrate.
3	Are sometimes very tired.
4	Are willing to learn.
5	Lack cognitive capacities to follow my teaching.
6	Are very motivated.
7	Other
8	I don't know.

52. Do you intend to leave this school in the near future?

If no, please continue with question 53.

1	Yes
2	No
3	I don't know.

Questionnaire ID:

53. What are the reasons you intend to leave?

Multiple answers possible.

1	I will be send to another school/training institute.
2	I would like to go to another school/training institute.
3	I do not yet know. I am looking for alternatives with a better salary.
4	I will change to the private sector/industry.
5	I will become self-employed.
6	I will go abroad.
7	Other: please specify _____
8	I don't know.

Thank you very much for your time and support!

7.5.2 School clusters under the Ministry of Education

Figure 26: Clusters of participating TVET schools under MoE in Myanmar.

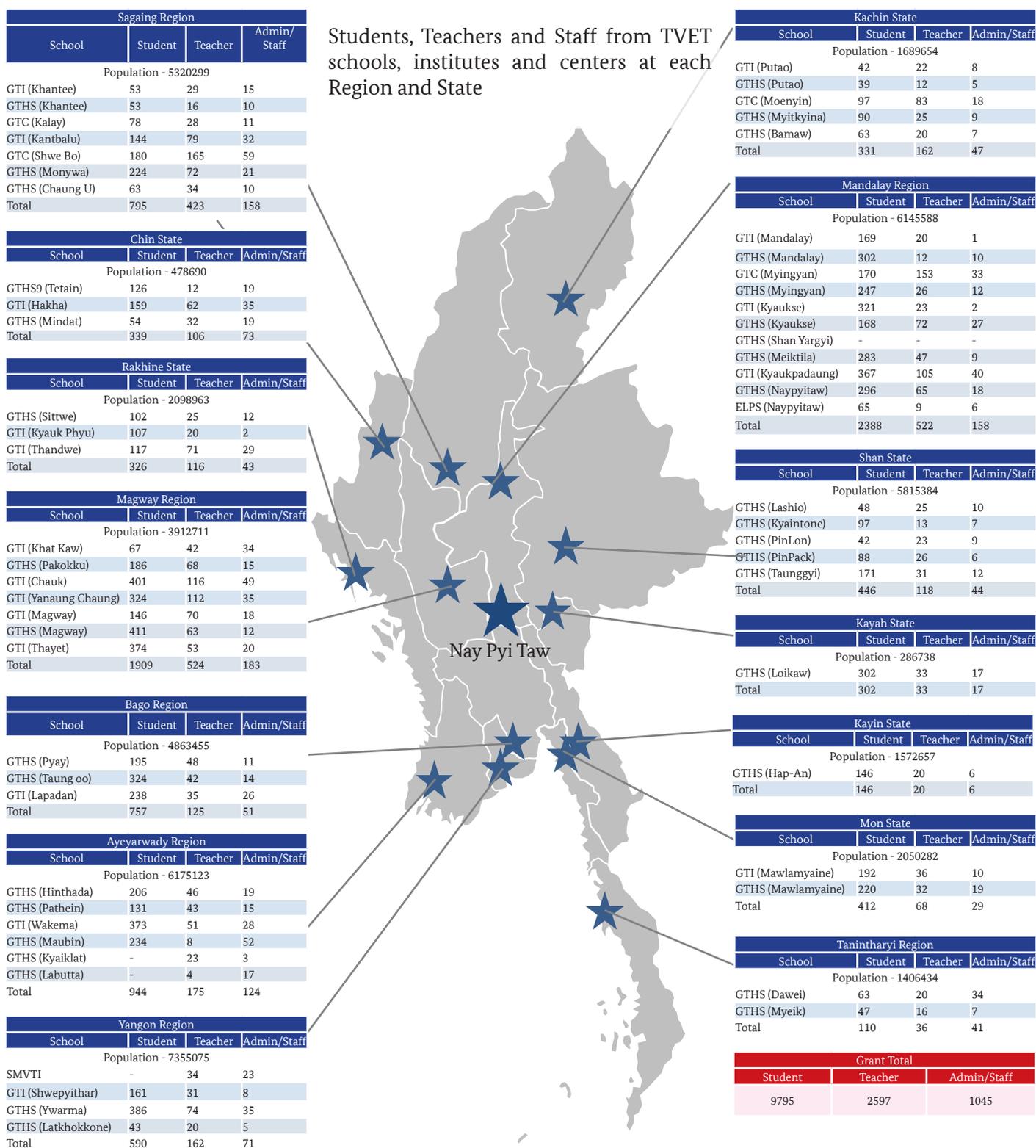


Figure 27: TVET schools in Myanmar in 2017

Number of trainees accepted and trained at Government Technical Highschools (February)

Sagain Region

1st year	2nd year
336	182

Chin State

1st year	2nd year
96	53

Magway Region

1st year	2nd year
287	244

Bago Region

1st year	2nd year
296	239

Ayeyarwady Region

1st year	2nd year
404	246

Yangon

1st year	2nd year
180	180

5528 - total number of trainees accepted and trained in GTHS in 2016-2017 FY

6546 - total number of trainees accepted and trained in GTI/GTC in 2016-2017 FY

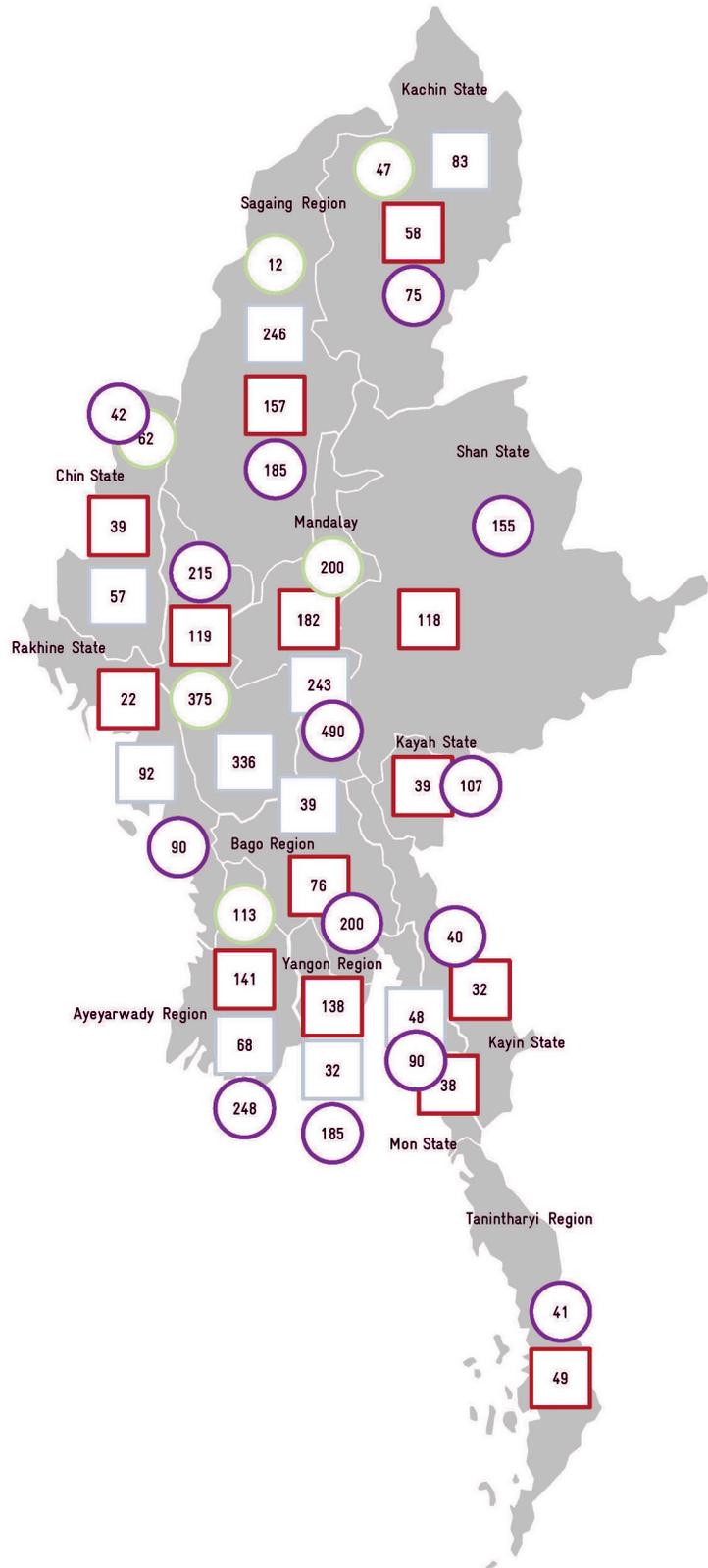
Legend

NO. Number of teachers appointed at Government Technical High Schools in 2016-2017 FY

NO. Number of teachers appointed at Government Technical Colleges/Institutes in 2016-2017 FY

NO. Number of students who received Government Technical Colleges/Institutes Diploma in 2016-2017 FY

NO. Number of students who received Government Technical High Schools certificate in 2016-2017 FY



7.5.3 Industrial Training Centers (ITCs) under the Ministry of Industry

Figure 28: Students, teachers and staff at the ICTs in Myanmar.

No. 1 ITC (Sinde)			
Batch No.	No. of Students		
	Male	Female	Total
37	140	19	159

No. 2 ITC (Mandalay)			
Batch No.	No. of Students		
	Male	Female	Total
10	121	29	150

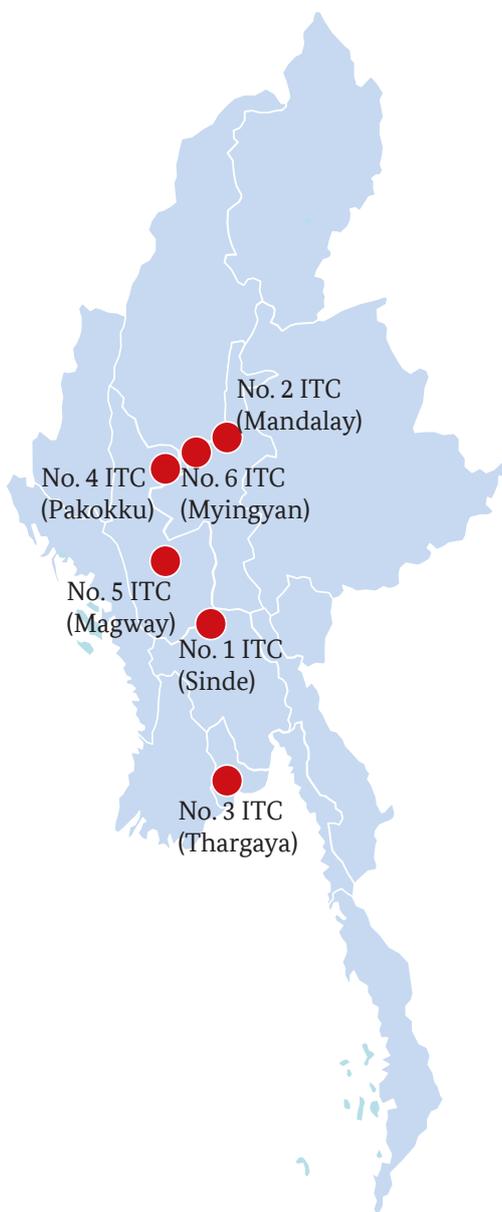
No. 3 ITC (Thargaya)			
Batch No.	No. of Students		
	Male	Female	Total
9	115	15	130

No. 4 ITC (Pakokku)			
Batch No.	No. of Students		
	Male	Female	Total
8	117	30	147

No. 5 ITC (Magway)			
Batch No.	No. of Students		
	Male	Female	Total
7	155	15	170

No. 6 ITC (Myingyan)			
Batch No.	No. of Students		
	Male	Female	Total
4	104	59	163

Total No. of Male Students	Total No. of Female Students	Total No. of all Students
752	167	919



No. 1 ITC (Sinde)		
No. of Teachers and Staff		
Male	Female	Total
23	26	49

No. 2 ITC (Mandalay)		
No. of Teachers and Staff		
Male	Female	Total
18	26	44

No. 3 ITC (Thargaya)		
No. of Teachers and Staff		
Male	Female	Total
16	16	32

No. 4 ITC (Pakokku)		
No. of Teachers and Staff		
Male	Female	Total
10	29	39

No. 5 ITC (Magway)		
No. of Teachers and Staff		
Male	Female	Total
18	22	40

No. 6 ITC (Myingyan)		
No. of Teachers and Staff		
Male	Female	Total
16	20	36

Total No. of Male Teachers and Staff	Total No. of Female Teachers and Staff	Total No. of all Teachers and Staff
101	139	240

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