

Work-integrated learning in-service teacher training at the Industrial Training Centre in Sinda

Abstract

This article focusses on the question how TVET-teachers' competency development can be supported through the implementation of a Mentoring Structure at a TVET school in a remote area in Myanmar. The school aims to perform the transformation from input-oriented education towards Work-Integrated Learning (WIL) with the aim of improving the school's labour-market-orientation.

A status analysis at school level brought up typical obstacles for teacher-training (lack of resources, e.g. time; lack of skills, e.g. information literacy) which hinder the transfer of new knowledge into real student-centered lessons. To close this transfer gap, a Mentoring Structure that embeds teacher training into a procreative surrounding was implemented throughout the TVET school. This Mentoring Structure consists of activities to foster WIL (e.g. Quality Management/5S, Total Productive Maintenance, Safety at work) and activities that raise a teaching network (e.g. Didactic Committee, Teacher Tandems). First experiences indicate that the Mentoring Structure is supportive concerning WIL and network synergies. Results also show that the Mentoring Structure has to integrate and conform to the existing top-down processes to be sustainable.

Key words: *teacher training, Myanmar, TVET, work-integrated learning (WIL), transfer gap, Mentoring Structure, competency development, labour-market orientation*

1 Socioeconomic background of the educational sector in Myanmar

Myanmar has a great potential for economic growth in terms of natural resources such as, oil, fruit export, hydropower, etc. Furthermore its location between India, China and the ASEAN seems to be a perfect basis to develop as a transit nation. Even more, there is a big potential for a flourishing tourism industry, e.g. on Myanmar's beaches. But, the country is still far from getting closer to sustainable economic growth. Many obstacles hinder the overall development, e.g. the ongoing ethnic conflicts in several areas in the country, the bad condition of the infrastructure, the miserable power supply and the lack of qualified employees (Fahrion 2013, 264). According to OECD measures, Myanmar is still a Least Developed Country (since 1987). To understand this ongoing situation and its derivation, one has to consider Myanmar's governmental changes during the last centuries.

Education in general had a very high status in the country, e.g. the literacy rate has been very high since Myanmar's period as a British colony (90.6 % of people aged over 15 in 2010, UNDP – IHLCA II 2011). Unfortunately, the conservation and development of educational

areas (schools, universities, private suppliers, and vocational education) was not a priority topic under the military regime, which replaced the former governmental structure in 1988. The regime tried to control educational sectors by restrictions, by derating independent and critical thinking, by putting high-ranking military officers into leading positions and by keeping the budget low. Through the restrictions and this shortage of resources, educational institutions became subjected to decisions of the military regime. Until now, there is still little budget (only 0.8% of the GDP in 2008, Schnoeller 2013, 1) to rebuild education throughout the country.

Most people learn how to write and read, but the quality of education in general suffered a lot under various restrictions. One profound interference was the closing down of universities and schools, by the government, in the year 1988 and during 1990 – 1993. With the re-opening some institutions were restructured and moved to remote areas. The purpose was to take away power from the students who were responsible for some riots and opposition during the military regime and to better control all educational sectors.

Additionally, exchange with the international community was blocked by the regime. Influences from outside could not contribute to country's development. From that time on, e.g. English language skills were lost. The only language used was Burmese, which made the exchange with the international research community as well as the usage of the existing (technical) training and teaching material from former international exchange countries impossible. Second, the government spent almost no money for education, there were shortages of budget for schools and teacher education and also the salary of teachers was (and is still) very low (Schnoeller 2013, 3). These two main aspects led to a decrease in quality retarded proper development in the field of vocational education over the regime-years.

The year 2011 marked the beginning of a new era in Myanmar. In that year the National League for Democracy (NLD) with its president Daw Aung San Suu Kyi, who is currently Myanmar's State Counsellor, came to power as a result of a national election. Hopes were high that this liberal-democratic political party would support the nation's educational sector and enhance development for sustainable growth. Myanmar's economy seems to have risen already with a GDP of 8.4 % in fiscal year 2016 (ADB 2017, 191). There is a substantial resource of 34 million employable people out of a total population of about 58 million people (UNDP – IHLCA II 2011, 32) in the country. The government has set clear goals to help to develop these future employees: First, a national education law is in progress. Second, the budget for educational programmes has been raised and third, a framework for education was developed. This framework is included in the National Educational Strategy Paper (NESP 2016), which promises to ensure "transformation" in all areas of education (pre-primary education, primary school, secondary school, higher education and vocational education).

For the TVET sector these transformations have to promote a change in the approach to teaching and learning as one implication of the above stated fast-growing labour-market. The economy's new and ever-changing requirements necessitate skilled workers and therefore a higher quality of Technical Vocational Education and Training (TVET). The goal is that

“learners can access TVET and graduate from quality-assured and labour market-responsive TVET programmes under a more effective TVET management system” (NESP 2016, 27).

To sum up, since its opening-up in 2011, Myanmar is stepping out of isolation’s shadow, but also out of isolation’s protection. The country’s fast changes and intended transformations in government level affect people’s working life as well as many parts of their private life. On the one hand, the new developments are enhancing new perspectives and possibilities, especially young people, but on the other hand they are disrupting established routines, and questioning traditional working practices. People seem to struggle with all this new input and change (Tun 2015, 6) that affects their education in so many ways at once. These challenges, which the vocational education sector has to face, are described in the following chapter.

2 TVET teacher training in Myanmar: difficulties and focal aspects

2.1 The role of TVET in Myanmar

Until the year 2035 UNESCO-UNEVOC sets Technical and Vocational Education and Training (TVET) as one of the seven priority areas for educational development in Southeast Asia (UNEVOC 2014, 1). The core challenge for vocational education is to meet the requirements of the fast changing labour-market. Pilz (2017) states that a “high percentage of youth unemployment is yielded from the inability of education and training systems to adopt provision of skills according to anticipated changes in the labour market simply because labour intelligence is weak or does not exist. The inadequate skills, which are below industry standards, are a result of the supply-driven mentality and lack of synergies with the industries and vice versa.” (Pilz 2017, 8). The goals for TVET have a high priority on the Ministries’ agendas, but cooperation and the usage of synergies between TVET-providers and companies is rare. There is serious mistrust among those partners, as companies have little hope and trust in the students’ employability and the use of providing exchange and the intake of students for internships and on-the-job-training. But in general, technical vocational education is very much the focus of the government. At all levels, involved from schools to ministries, there seems to be the common commitment that technical education is crucial for sustainable economic development.

With the establishment of the new government, the country stepped out on the world’s stage and immediately attracted many donors to (re-)join with money and programmes, especially to support the TVET sector. Many donor nations had stopped or restricted cooperation and had drawn back development programmes to show their disagreement during the times of Myanmar’s military regime (Minsat 2015, 237). The cooperation between Germany and Myanmar has a long tradition, especially in the support of technical advice and training, which started in the 1950s. The interruptions of development cooperation were revived by many international partners in recent years. Also Germany rebuilt its cooperation and the GIZ (Deutsche Gesellschaft fuer Internationale Zusammenarbeit under the BMZ, the Bundesministerium fuer Wirtschaftliche Zusammenarbeit und Entwicklung) intensified the

development cooperation with Myanmar including the TVET-area in 2012. After the first four-year period the program is now in the second phase. The goal of the TVET project is to reach sustainable growth through improving the quality of Technical Vocational Education and Training, especially matching the highly-demanded labour-market orientation. One path to reach this goal is the support of chosen schools in Myanmar under the Ministry of Education and the Ministry of Industry. In this frame, development advisors are located directly at schools in selected areas to enhance sustainable school development in terms of technical training, administration and didactics. These development advisors closely contribute to the optimization of information flow between the stakeholders (the vocational schools, Ministeries, and the private sector).

2.2 Challenges for TVET teachers' training in Myanmar

The workplaces in Myanmar are changing extremely rapidly. This affects the design of vocational education and, consequently, teacher training in the TVET-sector. New didactic approaches are necessary to help developing competencies and skills in order to meet these new and ever-changing requirements (Hoepfner & Koch 2015, 15). Therefore, when talking about high-quality education at TVET-schools, teacher training for pre-service and in-service teachers has to come first. The goal of the establishment of demand-driven teaching, according to companies' needs and the competencies required, can only be reached with professional teachers who are open and capable of adapting towards the new needs. High quality TVET-teacher training is absolutely necessary to raise TVET quality in Myanmar.

By looking at Myanmar's teacher training it shows that there is no nationwide institute for teacher training fully established so far. Teachers are nominated by the specific ministries after their application. The Ministries, however, apply different criteria for choosing teaching staff. The selected teachers differ in their respective educational backgrounds. Many newly recruited teachers hold a bachelor's degree. The bachelor studies are mostly focused on theory so that teachers are lacking technical practical skills and industrial experience. Other recruited teachers come directly from assignments in companies. They fulfil the practical requirements of vocational education, but they are lacking an understanding of a teacher's role and teaching skills.

Teachers are trained mainly in short-term courses that focus on technical input. The capacity development concerning social skills and vocational didactics and subject-didactics is largely missing. There is no systematic and common concept for teacher training. Therefore teachers are missing not only technical competencies but also pedagogical knowledge, training and experience. But the sheer fact that many institutions and stakeholders are aware and alerted to enhance teacher training brings discussions and also attempts to structure teachers' capacity development high on the agenda.

The role of TVET in Myanmar is very strong. The involved partners put an enormous effort into the structuring of teacher training and in the teachers' competency development. Yet there is a huge gap between the requirements of the workplace and the current development

level of teaching staff. On the higher level, decisions have been made to change towards active student-centred learning which leads to better employability of students. But, at school level, teachers are lacking technical and didactical skills to implement the newly required teaching mode.

3 Teacher training supported by Work-Integrated Learning (WIL)

The above described national transformational shift is focussing on the implementation of a new teaching mode, i.e. the didactic approach of student-centred teaching. As it was shown, a student-centred approach is crucial to reach employability within the students. To really implement the new teaching mode, it is necessary to develop the teachers' competencies first (Lenz 2013, 8). At the herein evaluated vocational school, new curricula are in the process of implementation. These curricula are based on learning fields and aim to enhance Work-Integrated-Learning (WIL). At the current status the respective teachers have to be trained on the content and shape of these new curricula. Therefore the concept of WIL was used not only in the context of students' learning but for training the schools' teaching staff.

Work-Integrated-Learning builds the decisive part of TVET sector's commitment to labour-market oriented learning for both, students and teachers. WIL is the basis for the strengthening of employability and should support teachers to teach their students in the frame of experiential learning. The concept of WIL describes all educational activities (lessons, projects, programs) that integrate formal curricula learning with its application in the workplace (Billett, 2009). The concept includes a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum. Different pathways are possible to reach this practical application: Within the external approach the learners leave their vocational institution to learn in a real work place in the industry (e.g. internship, on-the-job-training, job placement, industry visits). The second approach is an internal one, where partners from industry come into the vocational education institution to train teachers or students there. This training can either be in person or it can be conducted through the simulation of work situations. Underlying this approach is the concept of experiential learning, where the learner is developing skills through exposure to work, work related or at least simulated tasks (Raelin, 2010). Within WIL the training approach is a holistic one. Learners are encouraged to explore their subjects, which should simulate the real workplace, in order to train higher-order skills that exceed surface learning through rote-memorization (Roberts, 2012).

Two aspects hinder the realization of WIL at the observed vocational school: The first obstacle is the fact that the school is in a remote area wherein there is no industrial zone and, hence, no (relevant) companies available. It is difficult to establish real work-situations for teachers or students to offer work-integrated learning. The school's next industrial contacts are located in Yangon and Mandalay area, which is about an eight hour drive each way. The cooperation with these industrial zones is just being established so that in the future more and closer synergies with specific companies might be possible. At the moment the school cannot

provide in-company training and real work-integration in the teachers' education. The second obstacle is that Myanmar companies see little benefit in taking short-term trainees for on-the-job-training. From company side there is currently very little or no commitment to cooperate or invest in teachers or students development.

Therefore, the school decided to integrate WIL directly into the school's workshops. All trades' workshops have been developed to simulate, step-by-step, a real workplace. The goal is to offer the teachers and the students a learning environment which is very close to the workplace and where real work requirements like quality management, security issues and maintenance can be not only trained next to technical aspects but can be experienced and reflected. The concept of a Mentoring Structure, as will be described in the following chapter, was established to be supportive to the concept of WIL. The goal of the Mentoring structure is to realize authentic learning experiences for the schools' teaching staff. This is seen as the key element of teachers' capability to teach according to the new future requirements.

4 Status Analysis of a TVET school in Myanmar

From 2016 to 2017, qualitative observations of the current teaching situation have been conducted by teacher training experts from GIZ. During a one-week period the school's technical teachers (N=29) were led through four moderated sessions. Each session consisted of group work: a group interview or discussion on one topic of the status analysis (cf. table 1).

Table 1: **Topics of the sessions:**

session	topic	details
session 1	role as a teacher	<ul style="list-style-type: none"> • given tasks as a teacher • additional duties in the school • anticipated expectations towards teaching staff
session 2	outcome expectations	<ul style="list-style-type: none"> • self-efficacy • competencies for quality teaching
session 3 & 4	teaching & learning style	<ul style="list-style-type: none"> • teacher-centred vs. student-centred • surface learning vs. deeper learning • usage of teaching methods

In general, teachers are delivering technical contents mostly in a practical environment in the specific trades' workshops. Subject theory is taught in classrooms. The favoured teaching style for the theory lessons is teacher-centred with a mixture of teacher input and students' repetition (remote-learning). Concerning the practical lessons most teachers are using demonstration and imitation as teaching modes. The students are able to use the machines in the workshop and to actively try out the machines' specific usage in groups of 4 or 5 students

on each machine. To meet the requirements of the changing workplaces new curricula have been developed. The implementation of these curricula will start at the end of 2017. Therefore, teachers currently receive technical training from various suppliers. To transfer the new input and knowledge into competency-based lessons (theory and practical) the teaching mode needs to be transformed from teacher-centred input towards student-centred learning (Lenz et al. 2013).

4.1 Outcomes of the status analysis

Outcome 1: The teachers' role (tasks, duties, competencies) is not transparent.

The outcomes of the moderated sequences show that, for their role as a teacher, the teachers are not clear about their (new) role. Most of them never reflect on questions related to the tasks and duties vocational teachers have. So far, the tasks were mainly workshop maintenance and lesson delivery. Other domains that influence student achievement like classroom preparation, planning a lesson and reflecting on lessons after teaching (Marzano & Toth 2013) have not been considered yet. With the current implementation of new competency-based curricula, teachers gain a lot more responsibilities. Observations shows that teachers struggle with implementing interactive sequences into their lessons, as they feel that this teaching mode is so contrary to their own learning experience. It might need a change of the current mindset to rethink and reframe cultural educational values such as, discipline and students' passive reception of knowledge.

Outcome 2: Teachers are lacking self-efficacy.

The majority of the teachers are not self-confident about these new tasks and duties as self-efficacy is missing within the majority of teachers. This leads to a feeling of concern and also for some demotivation. When questioned about why they do not use new knowledge from technical trainings and why they do not start with lesson planning, the teachers mentioned that they feel unprepared. The teachers stated they have no experience with problem-solving and creative thinking themselves, so this makes it especially hard for them to develop these skills within their students. Furthermore the majority of the teachers are not self-confident about the new tasks and duties and have very low outcome expectations. There is little trust in one's own competencies concerning teaching and lesson planning. But when experiencing interactive training themselves the teachers enjoy this teaching mode from the perspective of a participant and recognize the advantages.

Typical examples and quotes from interviews and group discussions underpin this aspect:

- "I am not qualified enough to teach this (new) learning area"
- "My students are not motivated and have no discipline"
- "I don't know how to teach student-centred"

The teachers were asked to state which competencies they are lacking the most. The answers could be clustered and agreed on as follows:

1. Lack of information literacy and computer skills, as teachers have little or no experience in information research and also limited experience in using computers and the internet. In addition the lack of English language was mentioned as a big obstacle concerning information literacy and internet usage as many technical sources are provided in English language.
2. Lack of technical knowledge.
3. Lack of teaching skills concerning the three aspects planning, teaching delivery and evaluation (or assessment) of lessons.

Outcome 3: The usage of teaching methods needs to be improved.

During the qualitative observation, specific knowledge on teaching methods was assessed. Most teachers (27 out of N=29) agreed on the advantages and the need to adapt their teaching style and provide more student-oriented lessons in order to meet the requirements of a changing workplace. The results showed that vocational teachers from Myanmar understand the theory behind competency-based learning and teaching, they can repeat in own words and explain the difference between rote-memorization learning and action-oriented learning. But the teachers stated that they do not use interaction and teaching methods during lesson delivery and stick to the traditional teaching style (teacher-centred, input-orientated, rote-memorization learning). Very few teachers were able to recall the purpose and the structure of a specific example for a teaching method (e.g. guideline method, four step-method).

4.2 Discussion

To sum up, future teacher training has to develop the teachers' personal skills such as, decision-making, critical thinking and didactical skills to develop the teachers' capacity, to close the transfer gap and to support WIL and student-oriented lesson planning and delivery. Observation showed that most teachers have a very low outcome expectation and self-efficacy concerning teaching and classroom preparation. In general teachers mention that they are lacking detailed or routine technical knowledge as well as methodological (e.g. didactics, teaching methods, information search, computer basics) and personal competencies (e.g. decision-making, advanced planning, self-study skills).

Myanmar's educational system is very closely related to cultural aspects. These aspects determine and also structure the relation between teachers and students. The role of the students is rather passive, they receive instructions and knowledge through teacher-input, which the students have to respect. Hence the challenge is the transformation and opening of the teachers' mind-set concerning new teaching methodology. Throughout the teachers' learning experience rote-memorization was the sole method used.

The priority of lessons is very low. Other occasions like welcoming visitors, technical training, celebrations/donations/events, maintenance, commissioning, mobile training, meetings or duties are of highest priority, which hinders the conduction of a regular lesson structure. It is very common that teachers have to be replaced without notice. This prevents

the proper implementation of new curricula where teaching is not conducted topic by topic but lessons are integrated in learning projects that should lead the students to develop competencies (e.g. analytical skills, problem solving, critical thinking, teamwork, communication). This can only be achieved when one teacher is fully responsible and present for the preparation and delivery of his or her learning area.

To offer Work-Integrated Learning, especially in this remote area, the school needs the establishment of a Mentoring Structure as a supportive add-on. This Structure and how it supports WIL for teachers' training is described within the following chapter.

5 The Establishment of a Mentoring Structure as a central element of teachers' Work-Integrated Learning

Based on the theory of WIL and student-centred teaching and as a consequence of the results of the status analysis the concept of a Mentoring Structure for teacher training was developed. The structure consists of the establishment of mentors in the context of WIL and a lesson planning network. Its implementation started in 2016. In addition to technical training for teachers, installation and training on new machines a school-wide structure is being established that supports teachers to deliver lessons according to modern WIL situations. The goal of this Mentoring Structure is to build up a supportive environment for in-service teacher training. This should lead to an enhancement of the teachers' core competencies: "planning, conducting and evaluating teaching lessons and instruction, providing occupation-related learning environments, materials and media, guidance and placement of students, and assessment of student's performance." (TVET Consortium, Core-Shell-Model, 2005). Moreover it should foster an orientation to the requirements of the labour-market.

The Mentoring Structure includes a multi-level approach, i.e. school-wide activities that integrate all levels of staff: school management, heads of workshop, teachers and administration staff from student & training affairs departments. This multi-level approach should lead to a more fruitful basis for the school's transformation (Schroeder, Schulte, Spöttl 2013, 2) as synergies and knowledge that already exist throughout the school can be used. This is the basis for the acceptance and success of the Mentoring Structure. In a first step interested teachers were asked to establish working groups by self-organization. Through self-organization teachers should develop competency in decision-making and information research. This integration of responsible persons is providing them the possibility to take ownership for the different topics. The assumption is that this ownership leads to a better usage of new knowledge and therefore to teachers' competency development (Erpenbeck & Rosenstiel 2007).

Table 2: **Aspects of the Mentoring Structure**

<i>(1) Work-Integrated Learning</i>	<i>(2) Teaching network</i>
Quality management (5S Mentors)	Student-centered teaching (Didactic Mentors)
Safety at work (Safety Mentors), Personal Protective Equipment	Lesson planning (Teacher tandems)
Maintenance, Total Productive Maintenance (TPM Mentors)	

5.1 Work-Integrated Learning

To better sample the real work place the existing workshops at the school have been improved in the fields of quality assurance, safety and health at work, and responsibility for project management. Workshops are organized in such a way that they resemble real companies such that “theory and practice are so closely intertwined that separating theory and practice makes no sense for vocational teacher education (VTE)” (Lipsmeier 2013, 5). Therefore all workshops went through several procedures of Quality Assurance (ISO 9001, 5S, LEAN Management, Total Productive Maintenance). During the input phase Quality Management training for the school management, all heads of workshop and the technical teachers was conducted. After the training an interest group on quality topics was formed.. This interest group was given a structure wherein its responsibilities are defined in detail. The school is now guided through quality topics by 5S Mentors. The mentors are responsible for the evaluation of current conditions in the workshops. The important topic of safety is organized by another interest group. One teacher from every workshop is responsible to introduce this topic into the workshop: clarifying and regularly updating the need for Personal Protective Equipment, ensuring that all machines in the workshop meet the safety requirements and transferring the safety knowledge to students.

5.2 Teaching Network

The Second pillar of the Mentoring Structure is the establishment of a Teaching Network. The goal here is that teachers form a school-wide community of teaching practice. The teachers should learn to plan in advance and should reflect on their teaching. This aims to foster critical scrutiny and discussions about teaching and learning, as former interventions showed that training alone was not able to promote a transformational shift in the strongly held teacher-centred learning culture. The exchange on lessons should help to overcome the outcomes of the status analysis which are described within chapter 4.1. To strengthen this teacher community of practice, a teacher room was established and a didactic committee was

founded as a further part of the Mentoring Structure. The overall goal of the Didactic Committee is to enhance “visibility” of teaching, to show the teachers that they are important and that they are responsible for matching lessons to the future workplace. To reach this goal the mentors of this Didactic Committee are now trained to be multipliers for subject-didactics in their distinctive subjects. The main tasks of the Didactic Mentors is to enhance lesson planning by supporting the development of written lesson plans to implement the new curricula. Another task is to develop the quality of lesson delivery by the means of video-supported lesson supervision. Furthermore, the Didactic Mentors build up the teachers’ network through the implementation of a lesson planning duty, where interdisciplinary teachers meet in the teacher room for common exchange on their lessons.

6 Experiences and lessons learned

6.1 Experiences

It can be observed that the hierarchical structures, rules and regulations stand in contrast to many of the implemented activities. The establishment of a Mentoring Structure needs to be adapted in the future to better fit the cultural preconditions of Myanmar’s school system. For example the assignment of teachers to special interest groups needs to be done very carefully as mentors otherwise might have difficulties in giving advice to higher-ranking teachers. Bottom-up processes and democratic knowledge exchange have to be implemented step-by-step and have to respect the given circumstances that rule and regulate Myanmar’s teaching and learning culture.

The implementation of the Mentoring Structure is a very time-intensive process. It is difficult to find truly interested and skilled people that match the various tasks. Especially as the idea of networking and cooperation between the trades and even more the exchange on lesson planning is a truly new thing for the teachers involved. First experiences show that the Mentoring Structure is really necessary. Many activities were implemented in recent years and there are a lot more to come. The work of the mentors supports the implementation of the new competency based teaching and learning, and therefore enhances labour-market orientation.

Additionally the Mentors foster exchange among the peer-group. It is very fruitful for the in-house-training of the teachers to receive and give advice and examples on the individual level between colleagues. A further positive experience with the implementation of the Mentoring Structure is the competitive factor that supports personal growth – similar to a real workplace. Within the Didactic Committee, the members are physically walking through the workshops to find the teachers that are on lesson planning duty, to offer support and to collect open questions. This support through the didactic team is successful, the teachers now start to write down their ideas on lessons. The presence of the Didactic Committee also helps to connect teachers to other colleagues and supports the establishment of a professional community.

Furthermore, students are a challenge for the upgrading of teaching to a higher standard. The students are seen as unmotivated and passive (even if the teacher tries to enhance interaction). Students are not yet familiar with student-centred learning as discipline and rote-memorization are still the main focus of the nation's education. In the future, students should be trained to be a constructive part of quality education in vocational institutions. But the main idea of an interactive teacher-student relationship needs to be reflected and adapted to the very traditional teacher-student relationship where discipline is still more valuable than critical thinking.

6.2 Outlook on further teacher training

To support the mentors and their work it would be helpful to have more written procedures and tutorials. One idea is to develop tutorials, where interactive, student-centred teaching situations from Myanmar schools are shown. Also further activities have to be planned within the school management and the administration board. It is crucial for the transformation towards student-centred teaching to get more support from the official side of the school. Rules and regulations have to be implemented that support the idea of raising teaching (and teaching staff) to a higher priority level.

To sum up, the supportive surrounding is enhancing teachers' competency development. The combination of WIL with a teachers' community of practice improves the teaching situation. Further activities should have the goal of creating a strong feeling and positive attitude to the teaching as a profession. This is important to support personal growth and professionalizing of teachers (Loose & Spoettl 2015, 6) for to "be a great TVET teacher requires a paragon of virtue, knowledge and skill!" (UNESCO-UNEVOC 2014, 14).

References

- Asian Development Bank ADB (2017). Asian development outlook 2016 update. Meeting the low-carbon growth challenge. Mandaluyong City, Philippines: Asian Development Bank, <https://www.adb.org/sites/default/files/publication/197141/ado2016-update.pdf> (retrieved 2.6.2017)
- Billett, S, (2009). Realising the educational worth of integrating work experiences in higher education. *Studies in Higher Education*, 34(7), 827-843.
- Diep, P. C. (2016). Substantial policies and measures to promote quality assurance of TVET in Vietnam towards mutual recognition in ASEAN. In: *TVET@Asia*, issue 7, 1-21. Online: http://www.tvet-online.asia/issue7/diep_tv7.pdf (retrieved 2.8.2016).
- Duong, T. K. O (2016). Developing core competencies of students through Competence Based Assessment at Ho Chi Minh City University of Technology and Education. In: *TVET@Asia*, issue 7, 1-17. Online: http://www.tvet-online.asia/issue7/duong_tv7.pdf (retrieved 2.8.2016).

- Fahrion, G. (2013). Myanmar's Wirtschaft: ein ewiges Versprechen, 253-265. In: Koester, U., Le Trong, Ph. & Grein, Ch. (Eds): Handbuch Myanmar. Horlemann Verlag, Stiftung Asienhaus, Burma-Initiative.
- Haolader, F. A., Cicioglu, D., & Kassim, K. (2017). A Model of Technical and Vocational Teacher Education at Bachelor's Degree Level and its Relevance to the Occupational Tasks of TVET Teachers in the OIC Member States. In: TVET@Asia, issue 8, 1-19. Online: http://www.tvet-online.asia/issue8/haolader_etal_tv8.pdf (retrieved 28.01.2017).
- Hoepfner, H.-D. & Koch, H. (2015). Practice and Working Paper 4, Self-reliant Learning in Technical Education and Vocational Training (TEVT). RAVTE, Malaysia, Kuala Lumpur.
- Jailani, M.Y. et al. (2013). An extensive model for implementing APEL and quality assurance in TVET teacher training system for South East Asia. In: TVET@Asia, issue 2, 1-17. Online: http://www.tvet-online.asia/issue2/jailani_etal_tv2.pdf (retrieved 30.12.2013).
- Lenz, B., Wells, J. & Kingston, S. (2015). Transforming schools. Using project-based learning, performance assessment, and common core standards. Jossey-Bass, San Francisco.
- Lipsmeier, A. (2013). Approaches towards enhanced praxis-orientation in vocational teacher education (VTE). In: TVET@Asia, issue 2, 1-18. Online: http://www.tvet-online.asia/issue2/lipsmeier_tv2.pdf (retrieved 30.12.2013).
- Loose, G. & Spöttl, G. (2014). Securing quality in TVET - A compendium of "best practices": fourteen main principles for the improvement of Technical and Vocational Education and Training. In: TVET@Asia, issue 4, 1-8. Online: http://www.tvet-online.asia/issue4/loose_spoettl_tv4.pdf (retrieved 30.1.2015).
- Marzano, R. J. & Toth, M.D. (2013). Teacher evaluation that makes a difference. A new model for teacher growth and student achievement. ASCD Learn.Teach.Read. Virginia.
- Minsat, A. (2015). Sechzig Jahre Deutsch-Myanmarischer Beziehungen: eine Retrospektive, 234 – 241. In: Koester, U., Le Trong, Ph. & Grein, Ch. (Eds): Handbuch Myanmar. Horlemann Verlag, Stiftung Asienhaus, Burma-Initiative.
- NESP- National Education Strategic Plan 2016-21, Summary (2016). The Government of the Republic of the Union of Myanmar, Ministry of Education.
- Nurkholis & Petrick, S. (2014). "Yes, I can!" – The potential of action-oriented teaching for enhanced learner-centered education in Indonesian vocational schools. In: TVET@Asia, issue 3, 1-18. Online: http://www.tvet-online.asia/issue3/nurkholis_petrick_tv3.pdf (retrieved 30.12.2013).
- Pilz, M. (ed) (2017). Vocational Education and Training in Times of Economic Crisis. Lessons from Around the World. In: Technical and Vocational Education and Training: Issues, Concerns and Prospects, 24, Springer International Publishing AG 2017, Cham Switzerland.
- Raelin, J. A. (2010). Work-based learning: valuing practice as an educational event. New Directions for Teaching and Learning, 124, 39-46.

Roberts, J. W. (2012). Beyond learning by doing: theoretical currents in experiential education. New York: Routledge.

Erpenbeck, J. & Rosenstiel, v. L. (2007). Handbuch Kompetenzmessung. Erkennen, verstehen und bewerten von Kompetenzen in der betrieblichen, pädagogischen und psychologischen Praxis. 2. edition. Schäffer-Poeschel Verlag, Stuttgart.

Schnoeller, T. (2013). Das Bildungswesen in Myanmar In: Sektorprofil, Grenzenlos– Interkultureller Austausch, Wien, Online: www.grenzenlos.or.at.

Schröder, T., Schulte, S., & Spöttl, G. (2013). Vocational educational science. In: TVET@Asia, issue 2, 1-14. Online: http://www.tvet-online.asia/issue2/schroeder_etal_tvet2.pdf (retrieved 30.12.2013).

Tun, K. (2015). Social Protection as an Entry Point to Inclusive Growth in Myanmar. Tokyo, Japan: The Japan Institute of International Affairs (JIIA).

UNDP – IHLC II: Integrated Households Living Conditions Survey in Myanmar 2009 – 2010, Selected Poverty Relevant Indicators, June 2011, UNDP Myanmar, Yangon, Online: <http://www.mm.undp.org> (retrieved 27.4.2017)

UNEVOC 2014. Vocational Pedagogy. What it is, why it matters and how to put it into practice. Report of the UNESCO-UNEVOC Virtual Conference, 12-26 May 2014. Moderated by Bill Lucas. UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training UN Campus, Bonn Germany, Online: <http://www.unevoc.unesco.org>.

TVET@asia The Online Journal for Technical and Vocational Education and Training in Asia

CITATION:

Dallmeier, B. (2017). Work-integrated learning in-service teacher training at the Industrial Training Centre in Sinda. In: TVET@Asia, issue 9, 1-14. Online: http://www.tvet-online.asia/issue9/dallmeier_tvet9.pdf (retrieved 30.06.2017).

This document is published under a Creative Commons Attribution-NonCommercial-NoDerivs3.0 License



Author(s) Profile



Beate Dallmeier

Development Advisor
Deutsche Gesellschaft für Internationale Zusammenarbeit
(GIZ), Myanmar

Email: beate.dallmeier@giz.de