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"Yes, I can!" – The potential of action-oriented teaching for enhanced learner-centered education in Indonesian vocational schools

Abstract

Indonesia's large workforce is both a chance and a challenge. As a strategy against the skill mismatch between labour supply and demand, the government continues its efforts to increase school participation rates and invests in school infrastructure. As new industries develop and national and international labour mobility increases, graduates of technical and vocational education and training (TVET) need competencies that can be applied in changing work contexts. In 2012, the Indonesian Qualification Framework was introduced as a starting point for competency-based education and training in Indonesia. The question now is how to ultimately transfer these targets into teaching practice.

In many Indonesian vocational schools, lecture-style teaching combined with traditional teaching aids fail to prepare graduates to solve work-related problems in the context of new technical, social and environmental norms. The German didactic concept of action orientation aims at this holistic competency development through the so called "action-oriented learning'. As the general competency targets in Germany and Indonesia share many similarities, we suggest that the German approach of action-oriented learning has potential for improving teaching processes in the Indonesian context.

This assumption is based on an example of action-oriented learning in a tourism class in a vocational school in Surabaya, Indonesia. The purpose of this action research was to examine how role plays, as an action-oriented learning method, combined with multimedia-based learning materials could influence learning outcomes and student motivation. Compared to the traditional chalk-and-talk instruction, both motivation and self-confidence of the students were enhanced. Furthermore, the average student score rose by approx. 15% to 84%. This outcome is a positive sign for the application of action orientation in other learning environments.

In order to improve TVET practice in Indonesia, initial and further teacher training should focus more on didactics and incorporate learner-centered teaching methods. Furthermore, TVET practitioners should be encouraged to conduct more research to collect experiences and best practices.

1 Background: Socio-economic situation and its impact on the TVET system

Indonesia's large population of more than 250 million represents both boon and bane for education and training and the development of the labour market. Approx. 26% of the population are younger than 15 years and thus will enter the labour market in the next years (CIA

2014). Although the official unemployment rate is quite low with 6.6%, youth unemployment is high at 22,2% and more than 50% of all workers are employed in the informal sector (CIA 2014; Kim 2010, 162).

The structure of the Indonesian economy is changing and is moving towards the supply of more sophisticated products and services. The Ministry of Industry identified three main pillars of future growth: agro-industry, information technology industry and transportation industry (Kim 2010, 169). Furthermore, both national and international labour mobility plays a greater role as the formal labour market cannot absorb all the new workers, and disparities between different regions prevail in a country as large as Indonesia. In such a dynamic context, equipping workers with flexible skills for a variety of work settings is of special importance. These so called transferable skills can help workers to adjust to changing job requirements and further develop their skills and competencies. While the discussion on the definition and scope of transferable skills continues, several Southeast Asian countries have acknowledged the importance of the topic and initiated policy reforms (Manuson 2013; Trzmiel 2013).

As a reaction to these challenges, the Indonesian government raised the education budget to over 20% of the total budget. These funds should be invested into promoting access, improving quality and broadening gender equality at all educational levels. A special focus lies on skill enhancement and thus on the development of vocational schools (Kim 2010, 179f.). This focus is urgently needed as skill surveys show that secondary education (both general and vocational) is one of the major problems for skill development in Indonesia (Di Gropello 2011, 147f.)

Firstly, this article provides an overview of recent policies and trends for skill development in Indonesia. As the Indonesian Qualification Framework (IQF) was the starting point for competency orientation in the education system, it is presented in more detail. On this basis, we secondly compare general TVET competency targets in Indonesia and Germany and subsequently suggest that the didactic principle of action orientation can be a useful approach for improving learning outcomes in Indonesian vocational schools. This claim is then supported by a practical example of action-oriented teaching at a vocational school in East Java. Finally, the last section summarizes the most important aspects and recommends areas for future research.

2 Current trends and policies concerning the development of transferable skills in Indonesia

Economic and educational policymakers in Indonesia are well aware of the challenges and importance of improving outcomes of education and training. In 2011, the World Bank published a comprehensive report on skill demand, supply and gaps which provided a sound basis for the development and implementation of new policies (see Di Gropello 2011).

Following the Indonesian government's desire to improve learning outcomes, this article looks at competency development in Indonesian vocational schools, the so called Sekolah Menengah Kejuruan (SMK). By 2009, there had been more than 7500 vocational schools of which approximately ¾ are private and ¼ are public (Kim 2010, 182-183). The enrolment ratio in technical/vocational education as a share of total enrolment in upper secondary education was 42. 3% in 2011 and had been rising (World Data Bank 2014). This is consistent with the reform strategy "SMK Roadmap 2010-2014" introduced by the Directorate of Vocational Education which aims to increase the number of vocational schools, vocational teachers and students. Ultimately, the proportion of general senior secondary to vocational senior secondary schools should be reversed and reach a ratio of 33 : 66% by 2014 (Kim 2010, 185).

However, raising school and student numbers alone will not lead to a better skill match of SMK graduates with labour market needs. The World Bank's Skill Report showed that the skills most lacked by younger workers include English language, leadership, creativity, problem-solving and computer skills (Di Gropello 2011, 144). When it comes to graduates of secondary vocational education, the report shows that employers from both the manufacturing and the service sector expressed their need for more and better generic skills such as thinking skills, behavioural skills and the ability to work independently and in teams (ibid., 130, 147).

In order to improve learning outcomes in SMK, the Directorate of Vocational Education set additional targets to be reached by 2014. These include an increase in the accreditation rate of SMK, an increase in the number of schools that meet international quality standards (e.g. ISO 9001/2008), a widespread use of e-learning at SMK and the transformation of SMK into "teaching industry" schools (ibid, 187). The concept of teaching industry means that SMK specialize in producing specific products, parts, etc. for regional enterprises. This approach should create closer links between schools and companies, help the schools to generate additional income and show the TVET students, starting from the beginning of their training, that they are an important part of the production process and ultimately of their community's wellbeing. In addition, the Directorate of Senior Vocational Schools of the Ministry of National Education (MoNE) developed another strategy for a better integration of SKM graduates into the labour market. The learning outcomes in the area of "adaptive knowledge" (natural sciences, entrepreneurship skills, foreign languages and "basic competencies") should be strengthened[1] (ibid, 188). These competencies and knowledge are relevant for performing well in any job and therefore fall under the broader concept of transferable skills.

However, workers can only benefit from transferable skills if their prior qualifications and skills are recognized. Thus, one of the most important recent achievements of the Indonesian education system was the introduction of a national qualification framework that sets competency-based learning goals for all education and training courses. The Indonesian

[1] In Indonesian TVET curricula, learning contents are divided into three areas: 1) normative knowledge (e.g. religion, Indonesian language, physical education etc.), 2) adaptive knowledge and 3) productive knowledge & experience (specific work-related knowledge and skills for a certain training field such as hotel management, animal husbandry etc.). To ensure a higher mobility between TVET and general education, the vocational part of the curricula accounts for only 25% of the total content (Kim 2010, 183-184; UNESCO UNEVOC 2011)

Qualification Framework (IQF) serves as a comparison tool for improving international labour mobility to and from Indonesia (Santoso 2013, 12). Since many Indonesian workers work and acquire skills in the informal sector, the IQF should also ensure the recognition of non-formal and informal learning.

In addition, teacher development was a crucial reform area. The Teacher Law of 2005 included certain minimum qualification standards and substantially raised teacher salaries. As a result, the reputation of teaching as a profession has improved and more and better applicants are being attracted to the teaching profession. However, the increase in salaries has not led to a significant improvement in learning outcomes as of yet (Chang et al. 2014, 4). It seems that most teachers still rely on a lecture-style way of instruction that is easy to manage but does not promote the development of problem-solving skills and independent thinking (ibid.).

After this overview of the recent developments in competency and skill development in Indonesia, the next section will take a closer look at IQF.

3 The IQF as starting point towards competency-based TVET in Indonesia

The IQF consists of 9 competency levels. These range from education at the junior secondary schools (SMP) at level 1 up to PhD degrees at level 9 (PP 8/2012). For each of the 9 competency levels, descriptors of learning outcomes and competency are divided into four skill parameters: moral and ethics, work competences, knowledge comprehension as well as autonomy and responsibility. While the learning outcomes for 'moral & ethics' are the same across different occupations and for all skill levels, the other three parameters contain distinct targets for each level. The parameter 'work competences' includes both generic work competencies, that match a variety of occupational/professional situations, and working competencies that are specific to a certain training program. The parameter 'knowledge comprehension' is also training program-specific. The fourth parameter, autonomy and responsibility, is again broader and covers general managerial skills (Santoso 2013, 22). Looking at the competency targets in the IQF, it becomes clear that transferable skills form an important part of future education and training programs in Indonesia.

Under the IQF, the education and training courses at the SMK fall under competency level 2. SMK graduates are thus expected to perform work tasks on the level of operators. While level 2 is at the lower half of the IQF spectrum, the following excerpt shows that workers at this level require skills for independent decision-making, teamwork and quality awareness.

For SMK graduates, learning outcomes are described as follows:

a) Moral and Ethics

The worker

- "[is] Devoted to the One Mighty God;

- Possesses excellent moral, ethics and personal identity in carrying out her/his jobs;
- Acts as a citizen who is proud of and loves her/his nation and has faith in world peace;
- [is] Capable of working in teams and attests compassion to social, community and environmental issues;
- Values diversity in culture, vision, beliefs and religion as well as appreciates patent and property rights;
- Esteems law enforcement and demonstrates spirit to put priority to national and public needs" (Santoso 2013, 43).

b) Work competences

"[The worker is] capable to carry out specific tasks using tools, information and commonly defined working procedures, and demonstrates performance with measurable quality under direct supervision of her/his supervisor." (ibid, 45)

c) Knowledge Comprehension

"[The worker] possesses basic operational and factual knowledge and is capable to choose available solutions suitable for common [...] problems." (ibid, 45) [2]

d) Autonomy and Responsibility

"[The worker is] responsible for her/his own job and can be given responsibility to supervise other persons" (ibid, 45)[3]

In general, the introduction of the IQF and the different reform initiatives for strengthening TVET at the level of upper secondary education are important steps for improving learning outcomes. Nevertheless, the main challenge is to implement the new competency concepts in the classrooms. This requires a series of steps, starting from the formulation of IQF competency targets, their integration into TVET curricula and reaching as far as adjusting TVET teacher initial and further training courses to make teaching and learning processes more learner-centered.

In that sense, the next section compares competency targets in Germany and Indonesia and discusses opportunities for improving TVET learning processes.

4 Similarities in German and Indonesian competency standards: An opportunity for the didactic approach of action orientation

According to the IQF competency descriptions, transferable skills constitute an important part of all future education and training programs in Indonesia. This is a trend that the country shares with many others and, thus, it is natural to compare and learn from international experiences. This article links developments in Indonesia with experiences from Germany as

[2] Spelling mistakes in original quotation corrected by the author
[3] Spelling mistakes in original quotation corrected by the author

both countries have a long history of education cooperation[4] and the German TVET system enjoys a good international reputation.

The underlying concept and goal of TVET instruction in Germany is Vocational Action Competence. It has been introduced officially with the latest Berufsbildungsgesetz (Federal Law on Technical and Vocational Education and Training) in 2005. All TVET programs in Germany aim to develop Vocational Action Competence in their students. This competence is defined as:

> "willingness and ability of an individual to act adequately and responsibly in professional, social and private situations. Action Competence unfolds in the dimensions of (1) technical competence, (2) personal competence and (3) social competence." (KMK 2011, 15; translation by the author)

A fourth dimension that is connected to the other three is that of (4) methodological competence.

As TVET qualifications were already standardized nationwide, the introduction of a national qualification framework in Germany was not of the same importance as in Indonesia where qualifications differ and are not recognized everywhere. However, with the development of the European Qualification Framework (EQF), Germany assigned its existing TVET and higher education degrees to the eight-level framework to enhance European labour mobility. In the German Qualification Framework (DGR), the categories of action competence are structured slightly differently[5] but as all national framework curricula and training regulations still contain the definition above, this article will use this particular definition.

In order to develop Vocational Action Competence, teaching and learning processes in TVET need to be designed and implemented accordingly. For this purpose, the didactic concept of 'action orientation' has been developed and subsequently introduced into the curricula framework for all recognized occupations in Germany. Action orientation means that learning is structured into the steps of an action (see Figure 1) similar to that workers have to take in the workplace. Confronted with a new task, workers would need to independently gather information, plan and decide on their approach, implement it, control their performance and assess the outcome with a colleague/superior. In a vocational school, these steps serve as a structure that trainees can follow to autonomously complete the action and, thus, acquire new knowledge and skills.

[4] Both countries have been working together for decades in the area of education (BMZ 2011, 8). Indonesia belongs to the group of global development partners of the German development cooperation. One pillar of this cooperation is the promotion of sustainable economic development through TVET (iMove 2012, 23).

5 "The competency categories of the DQR are technical competence, divided into knowledge and skills, and personal competences, divided into social competence and autonomy. […] Methodological competence is understood as a cross-sectional competence and is therefore not mentioned explicitly in the DQR." (BMBF 2014, translation by the author)

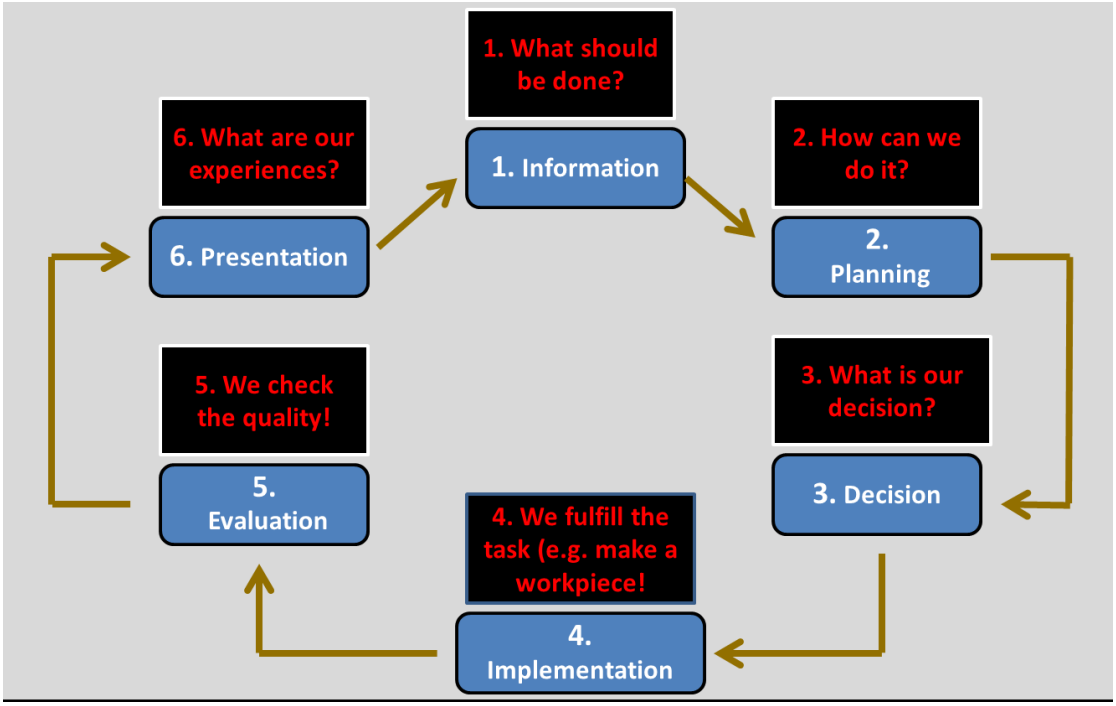

Figure 1: Didactic Model of the Complete Action (Source: Petrick, S.)

Amongst others, action-oriented learning methods that can be applied in TVET include: project method, exploration method, guiding text method, case (study) method, construction assignment, experiments and role play. Although action-oriented learning processes can be realized through a variety of methods, all of them share certain characteristics:

- Combination of theory and practice and of thinking and manual work
- Learner activation and learners' independent performance of work tasks
- Mixture of group and individual work to promote solidary behavior
- Creation of specific action material as results of the learning process (such as a presentation, a model, a work piece, a website, an event, a play etc.). The learners identify with the material resulting from their work and use it as the basis for discussion and assessment.
- Previous knowledge is re-activated and new information is introduced
- Teacher becomes a learning facilitator and advisor instead of an instructor
- Learning serves as the preparation for the future workplace but should also develop the personality
- Consideration is given to the subjective interests of the learners (self-directed, explorative learning) (Arnold 2001, 147f.; Jank & Meyer 1994, 355ff.)

The analysis of Vocational Action Competence and action-oriented learning provide the background for comparison with the Indonesian context. At first glance, the overall learning outcomes in TVET in Germany and Indonesia seem quite different. However, if we look at the different dimensions of both approaches, we can identify a number of similarities which

are summarized in Figure 2. This analysis was carried out by examining the general competency descriptors of the IQF for all four parameters on all 9 competency levels and assigning them the four dimensions of Vocational Action Competence[6]. Figure 2 shows which dimensions of Vocational Action Competence correspond to every IQF parameter.

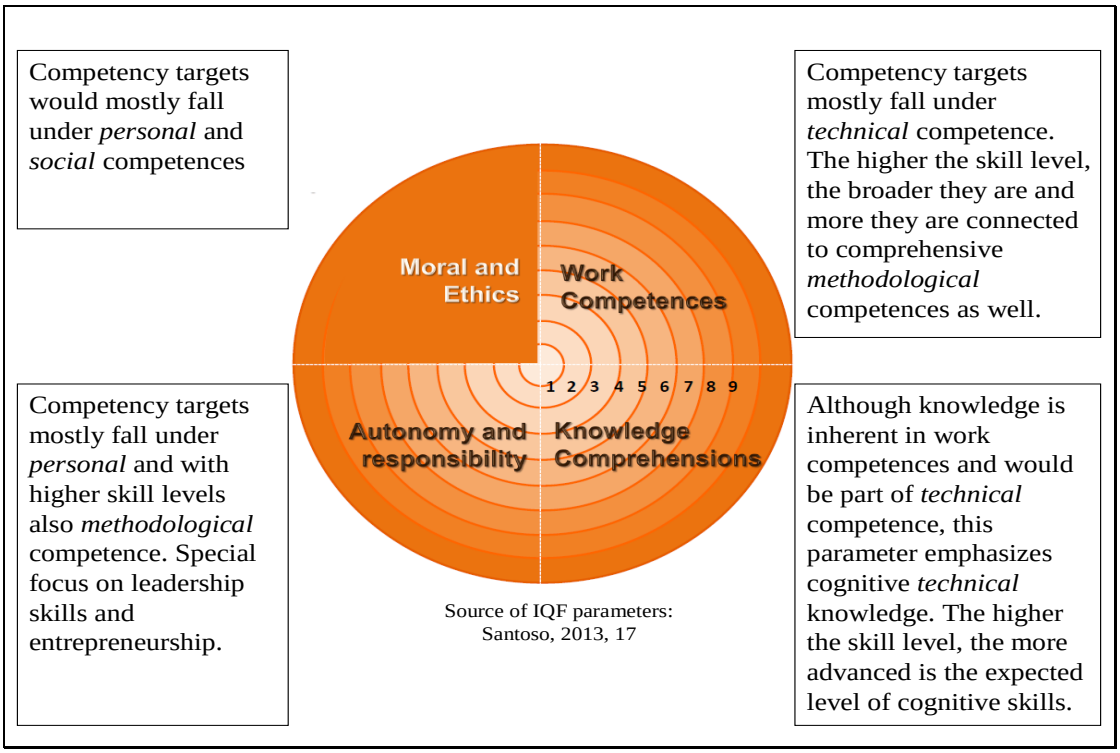

Figure 2: Comparison between the four dimensions of Vocational Action Competence and the four parameters of the competency descriptions in the IQF (Source: Petrick, S.)

This short analysis shows that all four dimensions of the German Vocational Action Competence can be found in the Indonesian IQF´s competency descriptions. However, the focus on methodological competencies seems to be more implicit and less specific in IQF than in the German context. The same seems to apply for social competencies. This difference might be due to the different cultural context of the two countries[7]. On the other hand, in the IQF there is a stronger focus on knowledge[8].Vocational Action Competence includes

[6] see Directorat Jenderal Pendidikan Tinggi 2012, 25-27 for the complete competency descriptions

[7] If we compare, for instance, Germany and Indonesia using Hofstede´s model of cultural dimensions, we find that Indonesia has a higher power distance but is characterized by a much lower degree of individualism and masculinity (i.e. competition, achievement and success are important values) Therefore, there might be less need in Indonesia to include social competences such as compromising, openness, empathy etc. as these values are already relatively important in society. See: Hofstede, Hofstede & Minkov 2010 for information on the cultural comparison.

[8] Thereby, the description moves from relatively low cognitive skill levels at competency level 1 (e.g. knowing factual knowledge) up to high cognitive skill levels (e.g. analyzing and evaluating knowledge) at competency levels 8 and 9. (see Krathwohl 2002 on Bloom´s Revised Taxonomy of Learning Objectives as an important concept in that field)

cognitive knowledge but it is necessary to perform work tasks; it is not an end in itself. Furthermore, there is a much stronger emphasis on leadership skills in the IQF than in the Vocational Action Competence. This is in line with the objective of the Directorate of Senior Vocational Schools of the MoNE to further strengthen entrepreneurship skills in TVET.

As there are many similarities in the learning objectives of the two TVET systems and as employer and employee surveys in Indonesia showed that more and sounder transferable skills are required in the workplace, we suggest that the didactical concept of action orientation can be a beneficial approach to improving teaching and learning in TVET in Indonesia.

After this theoretical analysis, the next section provides a practical example in which action-oriented teaching was implemented in one department in a vocational school in Surabaya, Indonesia.

5 Implementing theory into practice: Role play combined with multi-media-based learning materials in a tourism class at an Indonesian vocational school (SMKN 10 Surabaya)

This section presents findings from a small action research at a vocational school in Surabaya. Action research is a research approach that brings together systematic diagnosis, action and reflection with the goal of improving practice (Ebbutt 1985, 156; McNiff 2002, 15). Research subjects are derived from concrete social problems in a specific site and much less from previous theoretic scientific findings (Mayring 2002). In our case, the problem consisted of the unsatisfactory learning outcomes for the subject "Provision of Arrival and Departure Assistance" in the tourism training program.

5.1 Context setting and research process

SMKN 10 Surabaya is a public vocational school in East Java, Indonesia. It has six departments (accounting, office administration, banking, marketing, tour & travel, multimedia) where altogether 97 teachers are responsible for 1750 students. The school aims to train graduates who can compete on a national and international level. SMKN 10 aspires to achieve the status of 'international school' and is currently on the level of a "pre-international school".

As such, it fulfils the following requirements:

- Learning materials in mathematics, sciences and productive subjects must be bilingual (English and Indonesian);
- All learning rooms must be equipped with Information and Communication Technology (ICT);
- ICT must be applied in all of the available subjects;
- Teachers must speak English in mathematics, sciences, and production classes;

- There is an agreement with an international partner, especially on curriculum development.

The action research was carried out in the department for tour and travel in the 2nd grade which, between January and February 2013, consisted of 37 students. The entire department consisted of 5 teachers and 210 students.

The idea for this research was developed during and after a 12-month further training course on media development in TVET in 2011/12 which was conducted by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). After this training in Germany, Mr Nurkholis, a tourism teacher and also vice principal in charge of human resource development (HRD) at SMKN 10, prepared a concept for introducing action-oriented teaching methods in combination with multimedia-based learning materials in his class. He formulated two research questions to guide his analysis:

1) How does the use of multimedia-based learning material affect the students´ motivation and performance in the class?
2) How does the application of an action-oriented lesson design affect the learning outcomes in terms of students´ self-confidence and student scores?

The following table summarizes the different steps of the research process using McNiff´s eight-step model for action research (see McNiff 2002, 71).

Table 1: **Description of steps taken to carry out action research at SMKN 10**

Research phase	**Implementation at SMKN 10**
Review of current practice	Reflection on current teaching and learning practices in the tourism training program
Identifying aspects for improvement	Identification 'arrival and departure assistance' as an adequate research topic and understanding that instruction in that area is too abstract and seems not to prepare students for their later work tasks
Development of a solution	Increasing learner independence by applying role play as an action-oriented teaching method in combination with multimedia-based learning materials for increased work relevance
Testing this solution in practice	Follow action-oriented lesson plan and use new learning materials in class
Monitoring and reflection on results	Observation of the learning process and outcomes
Modification of strategy & next test	Use of video recording during students' role play

Evaluation of modified action	Observation of the learning process and outcomes
Continuation until results are satisfactory	Action-oriented approach adopted by other teachers

5.2 Description of the intervention

As one of the most important aspects of the tourism training program, the topic 'provision of arrival and departure assistance" was selected for the action research.

Previously, instruction on this topic would take place as follows:

a) The teacher explained the theoretical contents of the topic to students in lecture style using a PowerPoint presentation (mostly text and only few pictures). The students would listen and ask question when something was unclear.

b) The teacher would demonstrate an example in front of the class, e.g. how to welcome tourists and see them off (welcoming and departure remarks).

c) The students were then asked to write down their own welcoming/departure remarks (group or individual work) and memorize them in English.

d) Finally, they would present their texts, one by one, in front of the class and the teacher evaluated their performance.

While this learning approach includes at least some learner activity, there was need for improvement. Firstly, the role of the teacher was very dominant and the students were not challenged to assume more responsibility for their own learning. Secondly, students' English language skills could not develop well because they could use the teacher's oral presentation as orientation. Thirdly and most importantly, hardly any work-reference was provided. In neither of the learning phases did the students acquire an insight into the real-work situation of guiding or welcoming tourists. Therefore, they could not develop the necessary technical, social and personal competencies.

The action research was conducted from January to February 2013. To allow for some reflection on the new lesson design and to make time for changes to it, there were two research cycles. Table 2 provides an overview on the new learning unit which follows the didactic principle of action orientation and includes a greater variety of media than the previous instruction method.

Table 2: **Action-oriented learning in 'provision of arrival and departure assistance'**

Time	Action Phase	Activities	Media	Target competencies
90 min	1) Information	• Teacher explains the learning schedule and methods • Students collect information on the hotel, equipment required to check in, and how to communicate with customers • Students present the result of self-study through e-learning	E-learning materials (PowerPoint, videos, exercises) PowerPoint presentation	Technical competences (ability to communicate with a hotel reception, customer, etc.) Methodological competences (ability to conduct independent research, presentation skills)
30 min	2) Planning	• Teacher assigns a group to carry out a role play at a hotel reception; (group size: 5) • Students plan the role play, including setting, equipment, writing spoken text etc.	Student worksheet	Social competences (team work) Methodological competences (ability to develop a plan) Technical competences (ability to apply previous and new knowledge)
15 min	3) Decision-making	• Students discuss their role play plans with the teacher and receive feedback	Check list	Methodological competences (ability to reflect on and revise plans)
100 min	4) Implementation	• Students perform the role play at the reception counter they have built. Each group has different roles (tour guide, tour leader, tour manager, bell captain, bell boy, receptionist) • Teacher records the role plays with a video camera	Hotel check-in counter, baggage, rooming list, room keys etc. Video camera	Technical competences (ability to conduct a check-in) Social competences (team work, ability to communicate with customers, etc.) Personal competences (self-confidence, politeness etc.)

15 min	5) (Self-) Evaluation	• Students watch the recording of their role play to compare with their role play plan and the input from the information phase	Videos, pictures, monitor/ projector	Technical competences (ability to repeatedly apply new knowledge) Methodological competences (self-evaluation) Personal competence (sense of accuracy and quality of own work)
20 min	6) Presentation (+ Discussion)	• Students and the teacher evaluate together the process and the result of their performance	PowerPoint, videos, pictures	Technical competences (ability to repeatedly apply new knowledge) Methodological competences (self-reflection) Social competences (ability to give and receive feedback, communication skills) Personal competences (sense of accuracy and quality of own work, responsibility)

The main difference between the 1st and the 2nd research cycle was the use of video-recording for documenting of the role plays. Initially, the students played their roles and the teacher observed and provided his/her feedback. However, if some students did not perform well, they would benefit less from the time that is had been used for the actual role play. Therefore, video-recording was introduced in the 2nd research cycle. Before the role play, all groups would make some short exercises to familiarize themselves with the new situation and to receive some initial feedback from the teacher. Afterwards, they would conduct their role play as planned. The videos later gave the students the opportunity to see their performance from an objective perspective and compare their results with their classmates and with the theoretical input.

5.3 Results

The goal of the intervention was to improve learning outcomes, motivation and self-confidence of the students. Over the two research cycles, seem to have been achieved.

Firstly, students' motivation was improved compared to their motivation levels in the traditional learning setting. Motivation levels were assessed through teacher observations during the learning activities (using an observation list) and also through the use of a questionnaire. The questionnaire was distributed to all 37 students and included 4 questions:

- Did this learning process encourage you to study and was it exciting?
- Were the learning materials easy to understand?
- Do you think these learning materials can improve your competences such as: English language skills, social competences, guiding techniques, self-confidence, mastering the material?
- Should this kind of media also be used in the future?

The majority of the student feedback on these questions was positive. The students even said that they wanted to learn in the same way also in other subjects of their vocational training.

The learning outcomes were assessed by the teacher's observation of the work process and on the basis of the final product, the video recordings of the role plays. The average score of the 1st cycle was 74.8 % and the average score of the 2nd cycle was 84.14%. With the traditional methods of instruction, the average score used to be approx. 70%. The performance assessment is not competency-based yet. However, by structuring the teaching process into the different action phases and by assigning each phase and its desired competency goals, the teacher could gain a good understanding of how well the students met these goals by his observation of the work process and the final outcome.

Besides the improved student scores, the relevance to work practice was greater given that the learning situation was more work-authentic than previously. In the interaction with their group members, in their different roles, the students had a better chance to apply their language skills and the particular knowledge on arrival and departure assistance, as it would be required from them later on the job.

As a consequence of these positive experiences, this didactic approach has also been used by the other teachers at the department and has been expanded to other learning content as well.

These results present an example of how action-oriented teaching and learning methods can be applied in tourism training and show that they can promote holistic competency development.

6 Conclusions and outlook

In the Indonesian socio-economic context, transferable skills are increasingly in demand by employers but are often lacking on the employee side.

With its focus on work competencies, TVET is one of main types of education and training that needs to improve. The Indonesian government has introduced a number of policies that should boost both the 'quantity' of people in education and training and the 'quality' on all educational levels. In that respect, the introduction of the Indonesian Qualification Framework (IQF) in 2012 was a major achievement. The broader competency targets contained in the IQF must now be applied to training program contents, curricula and ultimately in pedagogies. Teaching and learning in Indonesian vocational schools continue to be mostly teacher-centered and include little variation in methods and media. Passive students will, however, not become active workers and thus there is a strong need for improving learning in the classroom.

Action orientation is a didactic concept developed in the German-speaking countries but can be a useful approach for the Indonesian context as well. Through action-oriented learning, TVET students can develop and improve transferable skills such as problem-solving skills, communication skills, responsibility, self-reliance etc. Action orientation does not require the latest technical equipment to be successful. Rather, the key is how assignments are structured into different phases so that the students manage their autonomous learning and the teacher role changes from "instructor" to "learning facilitator". As Indonesian TVET curricula include some flexibility to accommodate local training needs, teachers enjoy some freedom and could change their lesson plans to make their lessons more learner-centered.

A small action research project at a vocational school in Surabaya was carried out in 2013 to examine how an action-oriented lesson would influence students´ learning outcomes and motivation in tourism training. The example showed that learners' motivation, confidence and learning outcomes improved in comparison to the traditional teacher-centered instruction. As a consequence, this teaching style was adopted by other teachers of the school and has been expanded to other training topics. Due to the limited scope of the analysis, the results do not allow for generalizations about action orientation at other schools and subjects yet. In this regard, further research both over a longer period and for a broader sample could substantiate the findings.

In order to spread innovative teaching and learning methods, TVET teachers who introduce new concepts should be more encouraged to conduct research and share their findings. This is important to understand how didactic concepts can be applied in the Indonesian context and in which conditions. As TVET curricula in Indonesia have yet to be reformed to become competency-oriented, a further useful field of research lies in comparative curricular analysis for specific occupations between Germany and Indonesia. These findings and the input from the IQF standards could help develop new curricula as a sound basis for the design of learner-centered teaching approaches.

Furthermore, these new didactic concepts have to be integrated into the curricula of TVET teaching degrees at universities. Here, it is important that prospective teachers not only learn about these concepts in theory but also apply them in teaching practice. Thereby, they experience both the teacher and learner perspective. For those who already work as teachers, didactical knowledge and exercises should be an integral part of all further training courses. Thus, they would not only learn about technological innovations but also find out ways to help their students learn about them.

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