

Regional Cooperation in Vocational Teacher Education – building a platform for common research and development, consultancy and reform in East and Southeast Asia

Abstract

On March 28th 2014, 14 Universities from 9 countries in East and Southeast Asia, that had been actively involved in activities organised by the Regional Cooperation Platform for Vocational Teacher Education in Asia (RCP), founded a self-governed Regional Association for Vocational Teacher Education in East and Southeast Asia (RAVTE) with the support of the Thailand Ministry of Education.

Its organizational predecessor, the Regional Cooperation Platform for Vocational Teacher Education in Asia (RCP), was started as a project funded by the German government, that is to say the Federal Ministry for Economic Cooperation and Development and has been operated since 2009 by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). During the present phase begun in 2011, RCP has established itself as a regional forum for professional and scientific exchange in the field of vocational teacher education in China and the ASEAN region. RCP's primary aim is to improve cooperation and the creation and exchange of knowledge and good-practice in VTE. It addresses universities and institutions involved in VTE employing common structures to support and promote experience exchange and carries out workshops and joint research projects. To the present date RCP comprises 15 full or associate members hailing from 10 countries, including the Regional Centre for Vocational and Technical Education and Training Southeast Asian Ministers of Education Organization (SEAMEO VOCTECH).

The RCP's second line aims are based on a common development process between the member universities and institutions that reflect the ongoing developments in the region and the results of the joint work carried out under the auspices of the RCP. To contribute most effectively to development and systemic progression, the RCP and its member universities have developed a profile, focusing primarily on four major issues (see Schröder 2013, 13):

- Furthering and enhancing the continuous improvement of vocational teacher education (VTE) in the region within the context of changing economies and social systems especially in regard to pending reforms and other necessary TVET developments at a macro, meso and micro level.
- Contributing to the systemic development of vocational teacher education (VTE), qualitatively and quantitatively. The three learning places of vocational teacher education i.e. industry, universities and vocational schools, are as yet not systematically combined for the purpose of producing appropriately qualified TVET teaching staff.
- Carrying out research on vocational education (RVE). Vocational Education is not regarded as an academic discipline in most of the countries. Despite the urgent call for research and development, adequate and appropriate national and regional research capacities, that are fundamental to creating a self-reliant sustainable development of VTE and TVET-systems simply does not exist.

- The political goal of establishing a single ASEAN-market, the ASEAN Economic Community (AEC) by 2015 directly affects the migration of labour and creates the necessity for reforms in TVET to enable the comparability of skills certifications. Recent initiatives designed to strengthen cooperation in TVET between China and ASEAN such as the China ASEAN Vocational Education Forum or the ASEAN-China Centre have highlighted the problem of labour market mobility and drawn its significance into extremely sharp focus.

The RCP can now (Q1/2014) look back on two and a half years of rapid growth and outstanding achievements such as the national reforms of VTE put into practice in Thailand and Laos. The following article is addressed to scientists and practitioners alike. It offers a summary of the status quo and a reflection of the current project phase of 2011 to 2014. It will provide an overview on the Regional Cooperation Platform for Vocational Teacher Education in Asia (RCP), its aims and theoretical foundations, governing and partner structure, decision-making and interactive work processes and elaborates on its achievements and outlook.

1 Political and societal setting in East and Southeast Asian Region

The dynamic development of East and Southeast Asia economies has made it blatantly clear permanent economic structural change and a highly qualified skilled workforce is of the utmost urgency (see Schröder & Xiao 2013, 7).

The association of ASEAN countries into a single market impacts more than 600 million people. It is one of the most significant and challenging events in the history of the region. The ASEAN vision, “One Vision, One Caring and One Sharing Community”, is testament to the willingness of the community of states to act politically and economically at an equal level with its neighbours. One of the three pillars of ASEAN is the ASEAN Economic Community (AEC), which intends to transform ASEAN into a single market and single production base by 2015. One of the main objectives hereby is to increase the mobility of skilled labour in the region. The main areas of cooperation are: 1) the recognition of professional qualifications; 2) regional human resource development and capacity building and 3) the integration of industries across the region to promote regional sourcing (see ASEAN 2012).

After over 35 years of economic reform and opening up, China is facing the challenges of increasing global competition. One of the Chinese government’s key strategies for maintaining and enhancing its economic position in the global economy is to upgrade its industries. To this purpose tens of millions of well-trained workers and professionals are undoubtedly one of its significant prerequisites. Under these circumstances, vocational and technical education that bears the task of capacity building and skill training is of vital importance to the national economic development.

The region's political decision makers wish to meet the demands via mutual transregional activities. As a result, institutions such as the ASEAN-China Centre have been recently founded and high-level activities such as the China-ASEAN Vocational Education Forum are convened annually (vocational education of ASEAN is, however, to be represented in this instance by SEAMEO VOTTECH). The quality of human resources is crucial to all societies

involved and is defined as the strategic goal for attaining sustainable economic development. TVET plays a vital role in preparing the work force to enable the socio-economic development of the region. East and Southeast Asian countries are in the process of strengthening and reforming TVET to meet the demands of their economies and societies and in so doing structuring and forming their competitiveness, growth and development.

Vocational teacher education is of key significance to the further development and adaptation of vocational education throughout the region.

The Regional Cooperation Platform aims at improving vocational teacher education in the region via enhancing the exchange and cooperation of VTE-universities and institutions within its compass. The project is funded by the Federal Ministry Economic Cooperation and Development (BMZ) and operated by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

2 Enhancing regional cooperation in vocational teacher education

The fundamental aim of the Regional Cooperation Platform for Vocational Teacher Education (RCP) consists of enabling universities and other similarly important institutions in the region involved in the education of vocational teachers to cooperate in a process of regionalisation that will significantly support and improve the education of vocational school teachers.

Central to this cooperation are common transnational research procedures which, applied as activity research projects, strive to make an immediate contribution to innovation and reform via the partner universities. Allied to the concept of scientific coaching the research process contributes not only to the innovative development of the vocational education system but also to the very research competence of the researchers participating and the institutions and to the actual improvement of university teaching.

The cooperative work undertaken by the Regional Cooperation Platform is geared to the fundamental principles of German vocational education which amongst others is conveyed by the five central advance success criteria of the vocational education of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Federal Ministry for Education and Research (BMBF) (edvance 2012). The main focus of the work is constituted in the qualification of vocational education personnel, in this case vocational school teachers, vocational education research and cooperation with the market.

In the light of this, upon which the RCP project is founded, vocational school teachers are not to be understood exclusively as the scholastic counterpart to the operational educator in the dual system, but rather as the teaching force active in vocational preparation in intermediate programmes and at the level of the technical college where qualifications are acquired in line with German Qualification Framework and are equivalent to Bachelor degree level. Vocational education prepares the trainee, not only for the employment market, but also enables progression through acceptance into the tertiary education sector. The bandwidth of activities

and as a result the demands in the quality of the vocational teacher have been greatly increased (see Lipsmeier 2013).

At the same time it is expected that the vocational school teacher has practical vocational competences at his disposal, acquired through real industry processes. This is a prerequisite for a work-process oriented and work task based activities vocational education (see Schröder, Schulte & Spoettl 2013).

In this context the RCP universities have a central function in the education of vocational school teachers. Increasingly the realisation is coming to the fore to the universities and political decision-makers in the region that a comprehensive vocational teacher education should also encompass the learning locations and schools (see Dadang 2013). The socio-economic development in the region has advanced extremely differently, which is evidenced also by vocational teacher education and illustrates parallels with development phases of vocational teacher education in Germany (see Spöttl 2008). To a large extent vocational teacher education is located at the faculties of Engineering in the region but also in institutes of vocational education such as Tongji University in Shanghai. Each development stage of vocational education as a self-reliant scientific discipline can be seen as analogous to the research stage and research capacities in the universities that are not infrequently to be understood as purely academic institutions.

Between experts in the region the opinion prevails that the construction of vocational pedagogic or vocational science research capacities in the universities constitutes a conspicuous demand, the fulfilment of which will contribute to the systemic sustainable development of each of the nation's societies involved. The universities' societal competence and fields of responsibility will be extended. In the innovative further development of TVET systems the universities will occupy an active role in an advising and system development capacity. To strengthen this innovative aspect activity research is the prevailing research method employed by the RCP.

3 Theoretical approaches for the development and construction of the Regional Cooperation Platform

The development of the RCP and its sustainability depends primarily on its social actors, stakeholders and partners and their behaviour in a continuous process of change, development and learning. The construction of the RCP has been accomplished via participatory, process-related and inductive theory approaches that constituted the design of its content, activities and arrangement of its cooperative work. The theoretical approaches referred to the connection between organisational development, activity research and individual learning and the interrelation emanating from process and input.

The development of the RCP is also based on a specific conception of man which finds its expression in the educational goal of vocational pedagogy involved in vocational action competence. What is at stake here are the specifics of German vocational education. Vocational

action competence is the overall vocational education goal. It is established in the amendment of the 2005 Vocational Training Act (see BMBF 2005) and thus has vast impact on the design of TVET and VTE.

Theoretical approaches to link the development processes with individual and organisational learning processes

Theories or theoretical approaches are generally a favourite in project practice. Theories are abstract and universalised model-like descriptions of practice and the reading of them is usually hard to digest. To be confronted with theories, without knowledge of practice and being able to reflect upon it is shocking for the learner and usually leads to a life-long distanced, reluctance and even total avoidance of theory and science. On the other hand nobody would buy a car whose manufacture had completely ignored engineering science.

The development of the Regional Cooperation Platform for Vocational Teacher Education in Asia (RCP) was founded on theoretical approaches in unison with concept of Vocational Action Competence. It forms a unifying thread with the joint activities within the platform linking process and input to one another. Theoretical approaches of a variety of scientific and academic disciplines are involved here that are implemented in consultancy, development, research and learning contexts. They all relate to one another and can be linked to each other whether via the individual or the organisation. In spite of the various proliferating disciplines the origins of the methodology refers back to the [field theory] writings of Kurt LEWIN (see 1958).

- *Organizational Development (OD)* aims at the practical implementation of innovation and an increase of an organization's efficiency. It is a continuous, systematic process of organizational change in which the individuals of the organization are involved in a participatory manner with their learning subjects. OD is interdisciplinary and has developed a variety of approaches over recent decades such as Organizational Learning (Agyris & Schon 1972) and Knowledge Management (Nonaka & Takeuchi 1998). *Systemic consultancy* is the consultancy approach that is preliminarily used in OD.
- *Action research* addresses particular societal problems in terms of systems or organizations for the purpose of creating sustainable innovation (see Dehnbostel 1998). OD principles are applied such as the involvement of all stakeholders in the development process, recursive feedback cycles to initiate improvement and entering a common learning process. Researcher and practitioners cooperate closely in new developments, their implementation and evaluation. In addition to OD, research is conducted and new knowledge is generated and disseminated (see Molzberger & Schröder 2005). Action research can result in system reforms - when political decision makers are included in the process (see Boualins 2013) and is frequently employed in model projects (see Zimmer 1998).
- *Action-oriented learning* is a didactical approach in vocational education widely used in formal learning settings (see Jank & Meyer 1991) or for informal in-company competence development strategies such as in workprocess embedded competence development

called “Learning in the Process of Work” (see Dehnbostel 2007, Schröder 2008). Action-oriented learning as a didactical approach aims at competence development of individual learners in simulated or real working environments. The learning organization is based on work tasks. Work- and learning processes meld together (see Schröder 2008). Although action-oriented learning has a variety of theoretical foundations, its underlying principles are identical with the principles of OD and action research, which makes it a perfect supplement at didactical levels. Action-oriented learning is often understood as antagonistic to walk-and-chalk-methods and input learning environments. A similar approach, called CDIO, is widely employed in action-oriented engineering learning environments (see Chalmers University of Technology 2013).

The above-mentioned approaches were being employed in the development of the RCP to make it an organization clearly targeting the improvement of vocational teacher education in Universities. This naturally calls for a concentrated research approach as well as a didactical approach, preferably interacting smoothly to form an overarching method. The common guiding principles for the development of the organizational structure, carrying out of research, initiation of reforms and capacity building with for the improvement of vocational teacher education at university level, derive from the above approaches and are as follows:

a) participatory structure and organization

The participation of all involved persons and institutions in planning and decision-making processes is a precondition for bottom-up development that is sustainable. Relevant personnel and their particular area of expertise are to be included in decision-making processes for strategy and operation or planning, implementation and evaluation. Experience shows that the involving all stakeholders increases motivation and responsibility, improving the common learning process and the likelihood of the new developments' sustainability via common acceptance.

b) multi-perspectival achievement through the involvement of all stakeholders

The involvement of all stakeholders and their active participation creates a multi-perspectival approach. This approach ensures that the various societally relevant perspective are taken up in the analysis, planning and decision-making process, to make for a complete perception and to initiate a joint learning process. It reveals what relevant knowledge or activity knowledge of societal group is at hand and nonetheless shows what is not being used of it. The difficulty lies in creating anxiety free situations in which hierarchies can be bridged and overcome. Should this goal be achieved then innovations and quality can be developed.

c) reflection, generation of knowledge and knowledge management

Individual knowledge can be generated via reflection and this can be injected into knowledge management systems organisations to be implemented as a continual improvement process or linked by the individual to the existing systematised stocks of knowledge at hand. Reflection is a prerequisite for the use of informal competence development and the explication of im-

PLICIT knowledge, that is to say existing unconscious competences. Reflection is a prerequisite for organisational learning and individual learning.

d) methodical-structured, cyclical approaches

A methodically structured approach adapted to the conditions which repeats itself in light variations advances the efficiency of the cooperation and learning of a social group and gives rise to new developments. The differing structures as a rule are comprised of variations in the sequence of tasks - problem analysis, planning, carrying out or adaptation, quality assurance and reflection. The approach invariably follows a cyclic method, which enables the results of an evaluation to be reflected on in the light of individual experience and improved and fed into improved working methods. The creation of firm organisational structures and binding units, such as a class, research team, work group or steering committee are a prerequisite here.

e) social support via colleague, teacher, consultant, coach, instructor or learning facilitator

The various development-, work- and learning-processes are accompanied by appropriate forms of support. This could be a colleague, teacher, consultant, coach or a learning facilitator. Central to its success is the inductive approach that assists and strengthens in guiding the learning and realising the activity potential rather than that ushered in by a top down procedure. The all important task is to strengthen the potential of people to advance their insight of certain specific changes and ways of behaving. In all this enables a method that is crucial in systemic consultancy approaches. The teacher achieves learning causes the consultant uses in the first instance as available resources. An altered understanding of roles is crucial. Kurt Lewin distilled this very neatly: "I pose you a few questions to your information."

f) balancing process and input

Scientific work-processes can be described as goal-oriented and as learning conducive. A goal is set and the process needs to be designed and within the actual process adapted to changing conditions. In an ideal learning conducive work environment work-processes can always be combined with competence development. What applies to research can be applied to OD and to action learning as well. The prevalent question remains: How must the process be combined with demand-oriented inputs in order to enhance competence development?

The construction of the Regional Cooperation Platform is based on the above-described approaches. As a result structures have been put into place such as the Steering Committee and international studies which are central to the entirety of its joint cooperative remit. The studies are supported by Scientific Coaching method which is founded on the principle of learning during the process of work. The studies that is to say activity research procedures serve to develop research and consultancy competences and go a great way to initiating actual reform projects.

4 Organizational structure and internal processes of cooperation and coordination

The organizational structure of the RCP consists of different interacting bodies that support the steering and the operation of the project. A commonly signed Memorandum of Understanding (MoU) forms the basis for the participation and the cooperation in RCP as a joint platform. According to the MoU, the Steering Committee (SC), comprised of representatives from each partner institution and from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), is the highest strategic and decision-making body (see RCP 2013a). The partner institutions involved in RCP are academic, vocational teacher education institutions like universities and institutes with long-term experience and a mandate that enables them play an important role in supporting teaching staff development in their countries (see RCP 2013b).

The Steering Committee develops and leads the network based on the BMZ-assignment and the demand of the member institutions. Through its multinational nomination the SC has the overarching responsibility to support the on-going ASEAN integration processes as best as possible by using suitable mechanism and instruments. Those mechanisms and instruments for instance promote transnational statements and declarations as the Thanyaburi Statement (see RCP 2013c), set up cooperation agreements to enhance cooperation with regional organisations in the region (e.g. UNESCO, SEAMEO VOCTECH), promote scientific cooperation and reform oriented research between VTE institutions in the region in the effort to support the real development needs and reforms in the field of VTE. As the RCP and the SC grew, a Task Force comprising of five elected experts from the SC was established to make appropriate recommendations to the SC regarding RCP's future structure.

The basis for the operational work is given within the Plan of Operation (PoO). The PoO was developed and decided upon by the SC. The PoO comprises all activities of partner universities under RCP auspices, encompassing capacity building, meetings with and exchange of experts, shared events (i.e. conferences and meetings within regional and international contexts), research work, reform projects and mutual consultation.

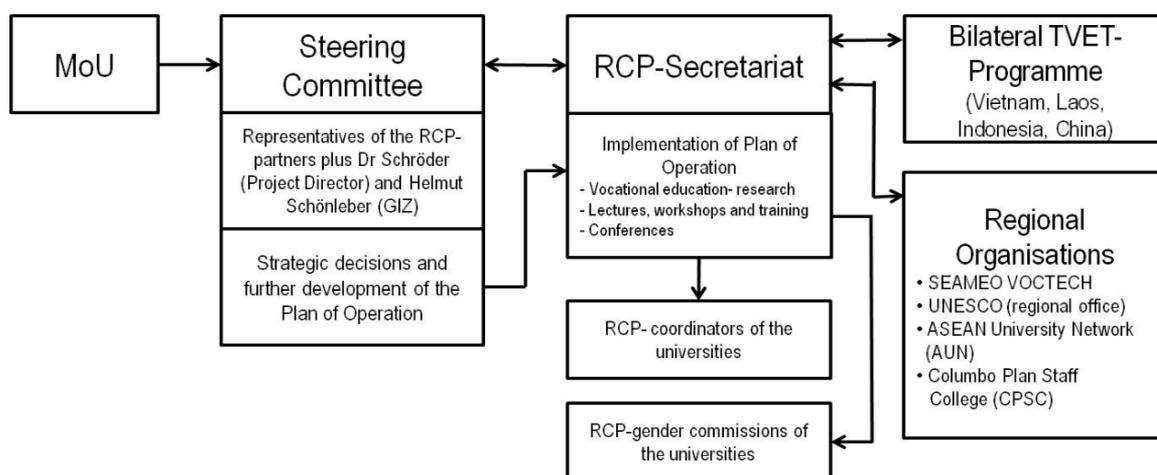


Figure 1: RCP – Organizational structure of strategic decision and operation

The RCP Secretariat – being located at the CDIBB at Tongji University in Shanghai China – is responsible for the operation of activities and monitoring the development processes. It coordinates and supports the work of partner universities, administering and monitoring project activities as well as ensuring the quality of the research and its transfer. The RCP Secretariat reports to the Steering Committee and informs on important news and events regarding the implementation of the PoO. The RCP Secretariat supports project management and consults the SC. It is operated by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and closely cooperating with the bilateral TVET programmes in Vietnam, China, Indonesia and Laos.

Each partner university nominates one RCP coordinator, who is the primary contact person for the RCP Secretariat and other partner universities at operational level. They are responsible for the conduction of RCP-related activities at their universities. The coordination of cross-institutional research teams involved in one common study is the responsibility of the university heading it and the research team itself.

The fast regional extension of the RCP caused the question of how to achieve a regional structure of cooperation that has an impact on the ground with respect to VTE-education TVET-systems but also at a national and regional political level.

Regional structure of cooperation and dissemination of information

At the beginning of this project phase (March 2011) the Regional Cooperation Platform consisted of five member universities from four countries. At the time of writing there are now 15 full members and two associate members from a total of 10 countries. Universities or other relevant institutions interested in becoming members submit their application to the SC which decides upon the application. In three cases the SC rejected the application on the grounds of the application didn't meet the standards.

RCP obtains scientific assistance from German scientists and institutions. In particular the ITB (Institute Technology and Education) from the University of Bremen in Germany supports the RCP and assists partner universities in fulfilling their tasks, particularly in carrying out research and institutional management. One well accepted method of interaction is the scientific coaching, which was developed for the needs of the RCP research teams.



Figure 2: Regional Extension of RCP in East- and Southeast Asia in December 2013

In December 2013 the RCP incorporated following institutions:

BNU	Faculty of Education, Beijing Normal University (China)
BUU	Faculty of Education Chonburi, Burapha Universit (Thailand)
CDIBB	Institute of Vocational and Technical Education/ Tongji University (China)
HCM UTE	Ho Chi Minh City University of Technical Education (Vietnam)
NTTI	National Technology Training Institute (Cambodia)
NUoL	Faculty of Engineering, National University of Laos (Laos)
NUTE	Namdinh University of Technological Education (Vietnam)
RMUTL	Rajamangala University of Technology Lanna (Thailand)
RMUTT	Rajamangala University of Technology Thanyaburi (Thailand)
SEAMEO VOCTECH	Southeast Asian Ministers of Education Organisation, Regional Centre for Vocational and Technical Education and Training
UNESA	Universitas Negeri Surabaya (State University of Surabaya, Indonesia)
UPI	Faculty of Technology and Vocational Education, Universitas Pendidikan Indonesia (Indonesia)
USC	University of San Carlos (Philippines)
UTHM	Faculty of Technical and Vocational Education, Universiti Tun Hussein Onn Malaysia (Malaysia)
YSU	Faculty of Engineering, Yogyakarta State University (Indonesia)

Associate Members and Observers:

GDVT Department of Teaching Staff Development (GDVT, MoLISA Vietnam)

NYP Nanyang Polytechnic (Singapore)

The Southeast Asian Ministers of Education Organization (SEAMEO) was established in 1965 by governments from Southeast Asian nations to promote regional cooperation in education, science and culture in Southeast Asia (see SEAMEO 2013a). The SEAMEO Secretariat, located in Bangkok, and the ASEAN Secretariat, located in Jakarta, coordinate their educational policies and activities (see SEAMEO 2013b). The Association of Southeast Asian Nations (ASEAN), as a regional political equivalent to the European Union, does not intend to build up complementary structures in the field of education. As a consequence SEAMEO is as a third party involved in all ASEAN-China activities in Education (SEAMEO 2013c). The ASEAN Education Ministers Meeting (ASEM) and SEAMEO Council (SEAMEO 2103d) comprise of the identical delegates.

SEAMEO (see SEAMEO 2013e) has 20 regional centres which focus on a specific field of education. The Regional Centre for Vocational and Technical Education and Training (SEAMEO VOTTECH) (see SEAMEO VOTTECH 2013) also signed the common RCP-MoU and cooperates closely in developing a strategy for vocational teacher education and conducting activities for the region. SEAMEO VOTTECH is the operational and complementary arm of ASEAN with respect to technical and vocational education.

Close cooperation is also established with UNESCO Bangkok, particularly in conducting joint research and generating policy recommendations for the region. Furthermore, the RCP was invited as the sole BMZ project to the UNESCO World Conference on TVET in 2012 in Shanghai. For the remaining term of RCP, both agreed on joint activities, as the carrying out of a joint research study on transferable skills (see UNESCO Bangkok 2013).

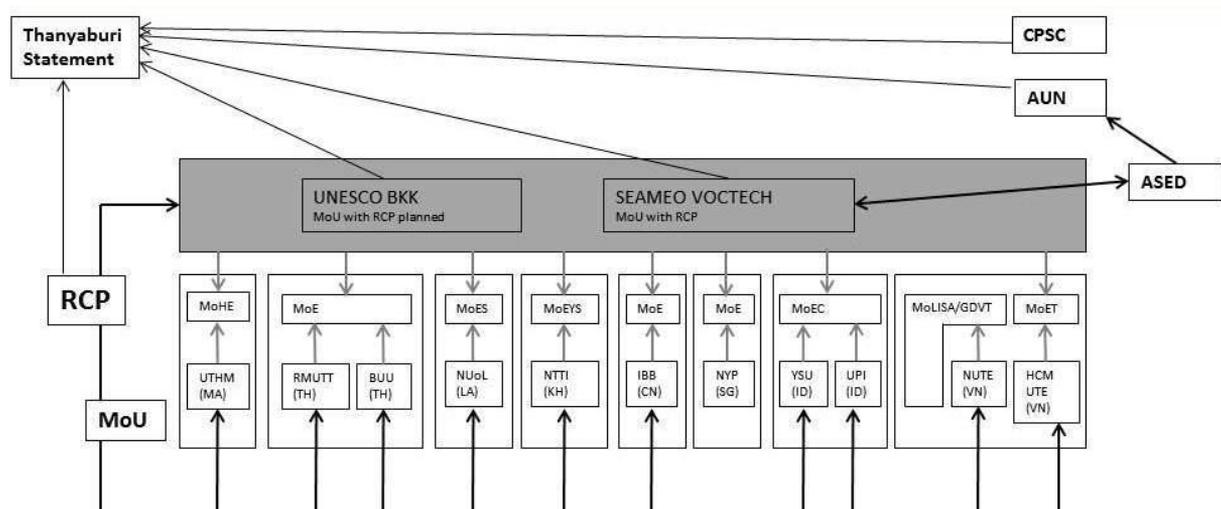


Figure 3: Cooperation structure with partner institutions and international organizations

In addition, close cooperative relations are enjoyed with the Colombo Plan Staff for Technicians Education (see CPSC 2013) and the ASEAN University Network (see AUN 2013), both of whom signed the Thanyaburi Statement (see RCP 2013c).

The current partner and cooperation structure permits comparative research approaches and the generation and dissemination of policy recommendations in an downstream and an upstream manner. The relevant national ministries can be either informed through the universities and through relevant regional organisation.

5 Integrated concept of competence development, research and reform

For the purpose of RCP attaining its goals, a vast variety of activities have been carried out throughout the entire region. Central to all those common activities was the improving and facilitating of knowledge exchange and knowledge generation through common research activities, its dissemination and initiation of reforms. All activities in its variety and diversity achieved a common understanding and similar mind-set and have, in conclusion, resulted in relevant changes in VTE. The common work within RCP was based on an integrated concept of competence development, research and reform projects.

5.1 Concept of demand-oriented competence development - scientific coaching

RCP employs an approach of work-based learning combining work-processes deriving from the common research projects with input-phases being subject of according workshops. This concept of “scientific coaching” enhances demand-oriented capacity-building during the process of research work.

The basic elements of scientific coaching derive from recently developed didactical approaches gleaned from work-based and workprocess-integrated learning, utilising the experience made within a work-process for intentional and directed competence development processes at the basis of work experiences (see Dehnbostel 2007, Schröder 2008). It can be successfully implemented wherever the daily operational work is structured in a learning conducive manner (see Franke et al. 1987; Bergmann 1996), which is naturally given to research work. This particular didactical approach can be applied very effectively to the needs of the scientific community. The following elements provide for intentional, but experience-based workplace learning. This kind of didactical concept opts for a demand-oriented combination of process and input phases, largely through workshops in combination with work- and learning processes (see Schröder 2008, 216-240; Schröder 2009).

- The design of the work-and-learning-process is based on a merger of working and learning infrastructure that respects following principles:
- A real work task acts as a learning task. The demands stemming from the work task (e.g. research tasks) and the work environment are constitutional and not to be changed in favour of a learning arrangement

- The learning infrastructure is to be carefully added to the constitutional working infrastructure. Phases of participatory planning and reflection of the research process and its results are to be combined with workshops.

A coach is supporting the research process. In the case of RCP a scientist, who supports the research process of the research group. He acts as a systemic consultant, improves the quality of the work and the competence development through participatory planning phases and through reflection.

Workshops: Planning, demand-oriented input-phases and reflection

Workshops serve several purposes by supporting the working and the learning processes and balancing both of these with a different focus. All workshops set out to support the research process as an experience-based work and learning process which targets an increase in research competences. The following workshop classes were carried out:

a) *Research planning workshops.* As RCP primarily focuses on action-research to initiate practical innovative impact via reform, the kick-off and organization of the entire research process was coordinated in an action-oriented manner. During the planning workshop the research partners agreed on research aims, the research process and distribution of research work and on the common requirements concerning input and the dates for carrying out the workshops

b) *Process supporting workshops.* In accordance with the expressed requirements the process supporting workshops were integrated into the research process. In terms of content two different workshops classes were held:

- Methodology workshops: a series of workshops on social empirical research was carried out to assist in the methodological aspect of the research process. The participants were given the opportunity to reflect and improve their individual design.
- Content-Workshops were carried out at the lead university regarding the content of the study. These workshops set out to create a common understanding up-to-date-knowledge e.g. developments of standards for VTE or curriculum development.

c) *Workshops for reflection:* these workshops set out to reflect on the individual experiences registered by individuals during the research processes and on the new knowledge being generated. These workshops were conducted by the ITB University of Bremen and provide reflection on and alignment of the acquired knowledge regarding vocational education as an academic discipline.

Most of the workshops were open to groups of interested stakeholders. The universities decided for themselves who would participate.

Off-research workshops

Additional workshops and training were offered regarding the improvement of teaching, gender issues in TVET and organizational development.

5.2 Research projects

As mentioned before the RCP focused on action-research, which was primarily a pragmatic decision, which was driven by the demand to initiate societal innovation with respect to TVET and VTE. Only through sound research, universities will eventually achieve evidence-based facts as a basis for consultancy and thus a broader societal perception of their extended roles. At present universities in many countries are being regarded as provider for programmes in Higher Education solely.

Research is always a learning and development process for all participating stakeholders. Research contributes to the researchers' competence development and thus to a continuous improvement of research capacity and vocational teacher education programs.

RCP supported research topics which were chosen by the partner universities being either in accordance with national reform interest, scientific interest or, when available, in coordination with bilateral TVET-projects to guarantee complementariness. The initial research topics were set by the Plan of Operation in August 2011. It was agreed that the studies must fulfil academic standards and are to be publicized. The research projects i.e. studies are shown at the RCP-homepage (see RCP 2013d). All research projects were headed by one university that was put in charge for the completion of the entire research product.

5.3 Research-based Reform Proposals

At the basis of the result of common research projects, two reform proposals, in Laos and in Thailand, were being submitted to the national Ministry of Educations and had been decreed.

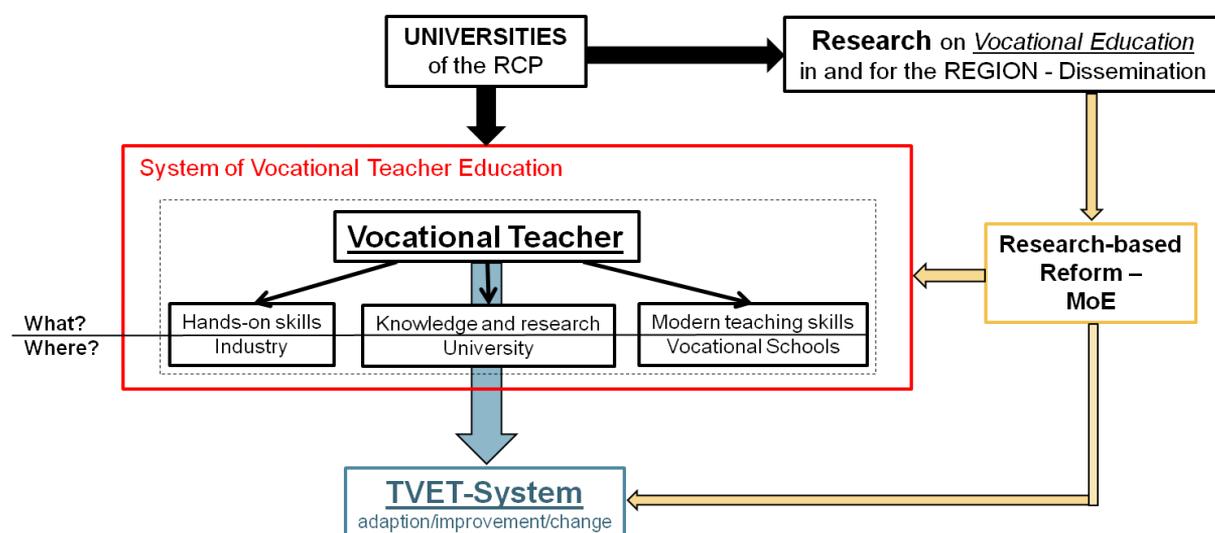


Figure 4: Impact on vocational teacher education and reform via common research

In Thailand the partner universities RMUTT and BUU developed a core curriculum for Vocational Teacher Education. The suggested curriculum was submitted to the MoE in May 2013 and had been accepted. The reform framework and its policy suggestions on vocational teacher education reform in Thailand was presented and discussed in the presence of H.E. the Deputy Prime Minister and Minister of Education and RCP representatives in a public hearing broadcast on national television (see RCP 2013e).

In 2011, the Laotian Ministry of Education and Sport commissioned the Vocational Teacher Education Department within the Faculty of Engineering to develop standards for vocational teacher education. The faculty submitted the proposal to the Regional Cooperation Platform (RCP) to develop these standards embedded in a scientific study in close cooperation with UPI (Indonesia), RMUTT (Thailand), and General Department of Vocational Teacher Education (GDVT) from the Ministry of Labour, Invalids and Social Affairs (Vietnam). As a result, Lao's PDR reform proposal constitutes recommendations for the implementation of standards in the academic education of vocational teachers. The reform proposal was submitted to the Ministry of Education and Sport in January 2013 and was decreed in February (see Boualinh et al. 2013).

6 Results and Recommendations

The work of the Regional Cooperation Platform is accompanied and evaluated according to the regulations of the Federal Ministry for Economic Cooperation and Development (BMZ) via a formative system of economically oriented monitoring. The results of its economic monitoring are presented and discussed in the RCP Steering Committee's quarterly group meeting. The evaluation results provide the foundation for the steering of the project.

In the following the major summative results of the monitoring is described.

Research and consulting expertise in the RCP Network have been improved (research-based policy advice in Laos and Thailand)

The universities in the region have successfully carried out a series of studies. One of the universities became the lead university and at least two other universities took part in each study. The studies served, however, not merely to secure the results of the research projects but also, due to the implementation of the research process, contributed to the goal oriented competence development achieved by scientific coaching. Above all, by focusing on the research approach of action research, the universities managed to successfully align their research projects with the initiation of national reforms in vocational teacher education.

The first results emerging from the work and project reports produced an improved performance capability in research and consultation on vocational education policy reform processes. For instance, decisive steps regarding the development of reform approaches in Laos and Thailand were initiated. The reform proposals constituted standards for the academic education of the vocational school teacher and were put into force as a reform procedure in February 2013. In Thailand a core curriculum was developed for vocational teacher educa-

tion. The curriculum was submitted to the ministry responsible as a reform proposal in May 2013. In the framework of a public hearing featuring representatives of the Education Ministry the reform proposals were presented and broadcast on Thailand TV.

As a consequence of the research results and the effects that emanated from them the RCP scientists have realised that cooperation within the RCP provides being innovatively active in terms of policy and system consulting. As a result of the common work in the 14 international research projects and the participation in the workshops, bilateral and self-financed activities have been agreed. A number of bilateral memoranda of understandings are in place that will significantly fortify future cooperation and work together .

A common consciousness has evolved on the similarity of the problems, the work and solutions between the RCP scientists. This has brought about an exchange and simultaneously evolved into a young regional scientific community which actually constitutes a community of practice. The external form of expression for this community of practice is the distribution of the results and the online platforms www.rcp-platform.com and www.tvet-online.asia.

Improvement of research expertise and teaching skills of the RCP partner institutions

During the two and a half years of project duration more than 1,200 participants have taken part in over 45 workshops and trainings on various subjects. Ninety percent of the workshops and further training participants, who were polled at the end of the events regard the experience and results gained as relevant to their work. The participants expressed themselves prevalingly positive regarding the running and quality content of the events. To accelerate its broad scale effectiveness at the micro level vocational teachers and students will be integrated into vocational education further education conducted by the universities.

Promotion of gender equity in TVET

Gender equity representatives have been appointed at the universities and conduct joint activities. To advance gender equity gender and equal opportunity commissioners were appointed at the partner universities. A three-part workshop series entitled, "Perspectives and measures for the advance of gender equity in TVET" was carried out. The purpose is to create an exchange between all parties to review the state of development regarding the theme complex "gender mainstreaming & equal opportunities". The group carried out a regional study here involving seven nations.

Improvement of performance of partner institutions in regional integration processes

Regarding regional integration processes in vocational education, RCP brought together the relevant regional organisations active in TVET and higher education. The Thanyaburi State-ment, that particularly emphasises the importance of technical and vocational education and training, vocational teacher education, vocational education research and the establishment of vocational education as an independent academic discipline in higher education for the advancement of academic development is significant evidence of the fruitful cooperation of the regional institutions in this matter.

A few of the important regional and international organisations will intensify the operative and strategic cooperation. SEAMEO VOCTECH and RCP have signed a MoU and agreed upon strategy and content. The agreement and cooperation with UNESCO Bangkok is similarly far reaching. RCP and UNESCO Bangkok have developed in cooperation with the partner universities a regional study on the subject "Transferable Skills in TVET", to promote the significance of developing so-called unskilled skills in TVET and advance the corresponding learning forms. This is an essential prerequisite for furthering economic and industrial development. The common study constitutes a contribution in advancing the debate on transferable skills in TVET in the Asia-Pacific region and evolving a common mind-set. Further informal work relations exist with UNESCO UNEVOC (Germany), the CPSC (Philippines) and AUN (Bangkok), KRIVET (Korea) and the TAFE Directors (Australia).

Improving communication and dissemination of knowledge

For RCP's establishing and regional dissemination of information and results, its public relations work was conceptualised anew. Regarding the developments of RCP's goals and activities and the distribution of the research results the website was relaunched www.rcp-platform.com. To promote regional knowledge transfer further the offer online has been extended to include six languages; English, Chinese, Vietnamese, Indonesian, Thai and Lao. The RCP homepage has registered an increase in interest in its content. The site is visited by an average of 1,400 interested parties each month. Alongside the continuing development of the homepage the PR concept also embraces the new conception of a brochure, a flyer and a quarterly newsletter which is to be published in all the partner languages and English. The setting up of the online journal www.tvet-journal.asia featuring free access to contributions from academics/scientists and practitioners furthers the transparency and discussion within the TVET community and extends the reach of its research results.

Perception of RCP as an expert forum for VTE

The RCP is regarded in the region as an expert forum for the education and further education of vocational teachers, management personnel and vocational education research. The enquiries related to this which extend even beyond the region are firm evidence of this. The RCP has been represented by contributions at numerous international conferences (e.g. the 3rd UNESCO World Congress on TVET in Shanghai and the Global Human Resource Forum 2012 in Seoul) in the region and in this way has been able to establish itself as an expert forum for VTE. This has led to a growth of expressions of interest from universities in the region. At the beginning of 2011 the RCP had 5 member universities from 4 countries. At this moment in time, there are now 14 universities from 9 countries with membership in RCP. Work contacts with renowned universities in Japan Korea and Australia have been intensified. As a result an international reputation with relevant organisations and institutions has grown visibly. RCP's activities and increasingly reported on in their journals and newsletters.

Conclusions

The member universities of the RCP together with leading regional organisations involved (UNESCO und SEAMEO VOCTEC etc.) have evolved a common identity and a deeper understanding of how to better cooperate in VTE – aiming to serve to the changing TVET development needs with the strong emphasis on enhancing their capacities and finally achieving the development and integration goals within their countries and the region. That has led to an increase in the demand for common activities and cross-institutional and trans-national cooperation in VTE.

The universities have built up their capabilities for innovative research in terms of applied research and had corresponding success registered in the system and policy consultation and as competent consultants in the direct improvement of the vocational education system. Among others, three developmental tendencies are required to strengthen these extremely politically and socially relevant aspects that must also be supported and secured by relevant protagonists in the member countries and in leading ASEAN-working structures:

The belief and the willingness of RCP members and promoters to conduct an “objective oriented and regional-wide accepted cooperation scheme in VTE” has had one of the most valuable impacts on VTE in the region. This regional approach of German development cooperation should be further promoted.

The universities and other cooperation partners should keep capacities free and provide resources, in order to take on assignments in action research and thus societally relevant innovation in VTE and TVET-systems.

Only the combination of a highly developed VTE-system, in line with the demands of TVET-systems and the socio-economic development, with the establishment of vocational education as an independent academic discipline can contribute in a sustainable manner towards the effective continuous development of TVET-systems.

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