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# Development of Standards for Vocational Teachers at Bachelor level in Lao PDR

Boualinh Soysouvanh

*Research and Development*

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# Imprint

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| **Editors:** | Regional Cooperation Platform for Vocational Teacher Education in Asia (RCP) |
| Layout & Design: | Gaby Tobler |
| Place: | Shanghai, P.R. China |
| Date of Publication: | October 2013 |

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## List of Abbreviations

| | |
|---|---|
| ADB | Asian Development Bank |
| ASEAN | Association of Southeast Asian Nations |
| CBT | Curricula Based Training |
| CCSSO | Council of Chief State School Officers |
| DHE | Department of Higher Education / MoES (Lao PDR) |
| DTVE | Department of Technical and Vocational Education / MoES (Lao PDR) |
| ESDF | Education Sector Development Framework |
| ESDP | Education Sector Development Plan |
| FE | Faculty of Engineering / NUoL (Lao PDR) |
| FoE | Faculty of Education / NUoL (Lao PDR) |
| GIZ | Gesellschaft für international Zusammenarbeit GmbH |
| HOTS | Higher Order Thinking Skills |
| ICT | Information and Communication Technology |
| ICT–CFT | Information and Communication Technology – Competency Framework for Teachers |
| ILO | International Labour Organization |
| InTASC | Interstate New Teacher Assessment and Support Consortium |
| IVET | Integrated Vocational Education and Training |
| KMK | Standing Conference of the Ministers of Education and Cultural Affairs of the Laender of the Federal Republic of Germany |
| Lao PDR | People's Democratic Republic of Laos |
| LVQF | Lao Vocational Qualification Framework |
| MoE | Ministry of Education (Lao PDR) |
| MoES | Ministry of Education and Sports (Lao PDR) |
| MoLISA | Ministry of Labour, Invalids, Social Affairs (SR Vietnam) |
| MoLSW | Ministry of Labour and Social Welfare (Lao PDR) |
| MPI | Ministry of Planning and Investment (Lao PDR) |
| NESRC | National Education System Reform Committee |
| NESRS | National Education System Reform Strategy |
| NQF | National Qualification Framework |
| NTC | National Training Council |
| NUoL | National University of Laos |

| | |
|---|---|
| NSEDP | National Socio-Economic Development Plan |
| PM | Prime Minister |
| PMO | Prime Minister's Office |
| QualiVET | Quality development and quality assurance with labour market reference for the VET systems in the metal sectors |
| RCP | Regional Co-operation Platform |
| SEAMEO | Southeast Asian Ministers of Education Organization |
| SEAMEO INNOTECH | SEAMEO Regional Centre for Educational Innovation and Technology |
| Sida | Swedish International Development Cooperation Agency |
| SIREP | SEAMEO INNOTECH Regional Education Program |
| TDA | Training and Development Agency for Schools |
| TESAP | Teacher Education Strategy for 2006-2015 and the Teacher Education Action Plan for 2006-2010 |
| TS | Technical School |
| TTEST | Teacher Training Enhancement and Status of Teachers Project |
| TT-TVET | Teacher Training for Technical and Vocational Education and Training |
| TVS | Technical and Vocational School |
| TVET | Technical and Vocational Education and Training |
| UNDP | United Nations Development Program |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| VEDC | Vocational Education Development Centre |
| VTE | Vocational Teacher Education |

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## Executive Summary

The study describes the development process of standards for vocational teachers at bachelor level in Lao PDR, based on the current situation of the national education sector. In order to emphasize the practical relevance of the study, it forwards a proposal of national standards for vocational teachers at bachelor level and recommends a strategy for how to implement these standards. For this, the study shows the necessity and the meaningfulness of standard development, the theoretical basis of standards, and the results and conclusions of a comparative analysis of currently existing standards, which have been incorporated into the development process. Furthermore it discusses the prerequisites for a successful implementation of the drafted standards and makes a proposal for an implementation strategy.

To achieve the greatest possible political acceptance, relevant stakeholders from the academic and the scientific fields as well as representatives from the political arena have been involved in the development process right from the beginning. Amongst others, in particular the Ministry of Education and Sports, diverse vocational schools, the Faculty of Engineering at National University of Laos and its Departments and the Faculty of Education took part in the process of development. Although, its economy has grown remarkably in recent years, Lao PDR is still one of the least developed countries. In 2010 the gross domestic product grew by 8.3 % and from 2011 to 2015 an average growth of at least 8.0 % is assumed. Apart from this solely economic development, the Lao government is continuing to meet its poverty-related Millennium Development Goals to be achieved by 2015 and is striving to end its status as a least developed country by 2020.

One of the most challenging tasks for this ambitious timeline is the development of the Technical and Vocational Education and Training (TVET) sector. For the purpose of providing a skilful labour force, the Government of Laos has made great strides great efforts in reforming the national education system through commitments in various policy documents, such as the National Education System Reform Strategy (NESRS) and the Education Sector Development Plan (ESDP). The latter was developed by the Ministry of Education and Sports (MoES) to facilitate the development of the education sector in a sustainable and balanced way. Even though its target is to harmonize all activities, the ESDP itself has not specified any details concerning the development or implementation of standards. Instead it contains legal regulations related to the implementation of such standards. In most of these documents TVET is regarded as an integral and crucial part in preparing employment for the people and skilled workers in industry. The vocational teacher training institutions are still not able to provide a sufficient number of well-trained teachers, capable of educating the workforce demanded. As well-trained teachers are essential for the provision of a qualified workforce the standards, developed in this study, aim at improving the quality of teacher education.

According to the Lao Educational Law, issued in 2007, the educational system consists of four main pillars, Early Childhood Education, General Education, Vocational Education and Higher Education. One of the key areas identified in education reform is the expansion of technical schools and vocational training, as development of this educational pillar is regarded as making an integral and crucial contribution to the development of the whole country. Irrespective of the provider of education and training, vocational education in general is subdivided into three levels; primary, middle and high, the grading of which depends on the previous education and experience and the duration of the education and training measurement. At each level it is possible for students to finish their vocational education in a regular or initial way, or in a continuous or linkage way, depending on their level of previous knowledge or qualification. A great number of public TVET facilities offer vocational education at schools, colleges, community learning centres and skills development centres, not to

mention numerous private schools and colleges. Together all training facilities educate more than 50,000 vocational students per year.

To make the certificates or degrees, awarded by various providers of education comparable, Lao PDR is currently developing a National Qualification Framework (NQF). The current draft of the NQF consists of eight different levels, each level specified by five descriptors. The lower five levels are apply to vocational education, the levels six to eight to academic education. For the development of standards for vocational teachers at bachelor level, the equivalent to level six, the NQF is important in two different ways. First, it describes the skills, the future teachers must be able to teach within the TVET system. Secondly it describes the skills, the future teachers have to acquire during their academic education.

In 2012 the Laotian Ministry of Education and Sports (MoES) assigned the Faculty of Engineering at the National University of Laos to develop Standards for Vocational Teachers in Lao PDR at bachelor level to improve the quality of vocational teacher education. The development of standards could be achieved within the framework of the Regional Co-operation Platform (RCP), providing financial support, facilitating the cooperation between scientists from different Southeast Asian countries as well as facilitating scientific consulting. This support promoted the researcher team to develop the required standards based on and embedded in a scientific study and thus to improve their acceptance significantly. Aside from the legal framework and education policy the research team considered two further aspects in developing the required standards, the specifics of vocational education and the results of an analysis of already existing standards.

To obtain a deeper understanding of standards the study described a foundation of standards for teacher education. Beginning with a general view of standards and their purposes the impacts of standard-based teacher education is to be discussed. Furthermore the specific role of vocational schools and the resulting requirements of vocational teacher are also elaborated. Based on the theoretical foundation of standards, five currently existing standards from England, Germany, Laos (primary and lower secondary teachers), the USA and Vietnam have been analysed. The analysis of these standards has been conducted using the following main questions, derived from the theoretical foundation: What does the formal structure of the selected standards look like? For which target group have the selected standards been developed? What is the main purpose of the selected standards? Based on the results of the analysis the proposal was to give the standards a three-staged structure. The first stage is subdivided into five so-called ‘Areas of Competency’, each of which is subdivided into specific competencies (second stage), illustrated by indicators (third stage). These standards comprehensively describe the expected knowledge, competencies, skills and attitudes a vocational teacher at bachelor level in Lao PDR must be able to demonstrate.

The drafted standards have been aligned with two standard frameworks, the UNESCO ICT–Competency framework for Teachers and the SEAMEO INNOTECH Teaching Competency Standards of the Southeast Asian Countries. Using them as benchmarks, the alignment is to ensure that the newly drafted standards are sufficient and comprehensive in terms of competencies appropriate to the 21st century, ICT-competencies and regional requirements.

The standards which have been drafted are suitable as a basis for the development of vocational teacher curricula. Not only do they expressly highlight the specific characteristics of vocational teachers, but they also take into account the cultural, ethical and political characteristics of Lao PDR. It is precisely for this reason that the research team is convinced that the study makes a valuable contribution to the improvement of the country’s vocational teacher education and hopes that the drafted standards stimulate discussion in other Southeast Asian countries.

# 1 Introduction

## 1.1 Background and Problems

Although its economy has grown remarkably in recent years, Lao PDR is still one of the least developed countries in the world. As a consequence, the Lao government has set the goal of shaking of this status by 2020. Human resource development is the second of four main strategic development plans agreed at the IX Communist Party Congress (cp. Lao People's Revolutionary Party 2011, 42). There is a persisting lack of skilled workers in Lao. Thus one of the most vital challenges here lies in the development of the vocational education sector, which currently simply does not meet the standards and requirements of its growing economy.

An important precondition for increasing the number of qualified workers is the availability of well-trained teachers. Previous studies have shown, however, that teachers at vocational schools remain insufficiently qualified at the moment (cp. Soysouvanh et al. 2011, 13-27). It is imperative therefore to improve vocational teachers' training and qualification of to attain the goal of providing the labour market with sufficient skilled workers to feed the growing economy. One important approach to improve the quality of education systems is to develop quality standards and to implement them.

In his speech to lecturers of the National University of Laos, given at a university meeting on 5th April 2012, Mr Samane Viyaket, former president of the National Assembly of Laos, emphasized the importance of improving the training of teachers for the development of Laos explicitly: "In order to develop the country, human resource has to be developed, but first teachers must be developed." Consequently, the teacher is the centre point around which education quality is improved. Moreover, teachers are not merely agents of knowledge transfer, they are vital people who advise, train and give good moral guidance to students.

The Strategic Plan for the Development of Technical and Vocational Education and training 2006–2020 lists the numerous weaknesses and the causes creating the low performance in the TVET system. One of the important reasons described by the plan for the weakness of the TVET system and the quality of teachers is as follows: *"The quality of TVET teachers remains mostly very low; teachers lack practical experiences, because they have not been employed in companies or enterprises and/or trained in the pedagogical field before."* (MoE 2007, 8).

As a result, the Departments of Technical and Vocational Training (DTVE) and Higher Education (DHE) the Ministry of Education and Sports (MoES), articulated the goal, to be achieved by 2020, for vocational teachers: *"building up vocational teachers for different subjects (technical and pedagogical) at different levels within the country and abroad in order to provide teachers for all TVET institutions sufficiently according to their demand; upgrading teachers for technical and pedagogical subjects and upgrading TVET managers and administrative personnel continuously in order to enable them to follow the ICT development."* (MoE 2007, 11-12).

Improvement of the quality and quantity of the education of the vocational teacher is all-important. The topic of this study is to create vocational teacher standards at bachelor level. In addition, the study deals with the implementation and evaluation of the results for the purpose of improving the implementation system in the future.

Nowadays, the initial and further education of vocational teachers in Lao PDR does not take place in a systematic manner. Some vocational education institutes (public and private) are permitted to conduct teacher education confined to their capacity and their own needs. If this is to continue, neither the country's needs for a skilled workforce will be met, nor the living conditions of the population improved. (cp. Singthilath 2012, 2).

To improve the quality of vocational teachers the study's main goals are:

- Firstly, to develop standards of vocational teachers at bachelor level in Lao PDR.
- Secondly to describe how these standards should be implemented.

Based on the study results a proposal will be submitted to the Ministry of Education and Sports for the approval of standards that will facilitate the implementation.

To achieve these goals, the Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has encouraged the efforts of the Lao partners. In particular, within the framework of the Regional Cooperation Platform (RCP) [1], GIZ has supported the research team both financially and organizationally, and in so doing has enabled this study to take place from the outset.

## 1.2 Approach of the Study

In preparing the study, a cyclic process has been adhered to. On the theoretical side, a permanent literature study and an analysis of existing standards has been carried out. This is done to take account of the current state of scientific research. Many stakeholders were involved in the research process. Firstly it was necessary to use the experiences of the persons involved and secondly to strengthen acceptance of the standards developed.

To gain information and develop this research the authors used the following methods regarding the theoretical aspects:

The analysis of literature provided the research team with knowledge on the theoretical foundation of standards, which has to be considered in the development process. In this context five already existing national standards could be identified. These standards will be described and analysed for their adequacy as a resource for the development of standards for vocational teachers in Lao PDR. The analysis has been conducted using specific criteria to find out which characteristics are absolutely crucial and which of the analysed standards may serve as a role model.

For the development of standards of TVET teachers and especially to ensure the acceptance of these standards it was clearly essential to involve the relevant stakeholders in Lao PDR in the process right from the beginning. The Lao stakeholders were chosen to be involved as the target groups in the development process for their significance in practical, political and academic terms and because these institutions represented either the demand or supply side of vocational teacher education:

- Department of Technical and Vocational Education (MoES)
- Department of Higher Education (MoES)
- Faculty of Education (NUoL)
- Faculty of Engineering (NUoL)
- Academic Affairs Department (NUoL)
- Civil Engineering Department (FE)
- Electrical Engineering Department (FE)
- Electronic and Communication Engineering Department (FE)
- Information Technology Department (FE)

1 RCP is a network that serves mainly universities involved in Vocational Teacher Education (VTE) within the ASEAN region and China. Founded in 2009 by Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, the platform incorporates presently VTE and Technical and Vocational Education and Training (TVET) in the region through the exchange of experiences, the development of programs and the accomplishment of common research projects. Further information are available at http://www.rcp-platform.com/.

- Mechanical Engineering Department (FE)
- Road-Bridge and Transportation Engineering Department (FE)
- Water Resource Engineering Department (FE)
- Academic Affairs Division (FE)
- Vocational Education and Development Centre
- Dongkhamxang Vocational School
- Lao-German Technical School
- Pakpasak College
- Polytechnic College
- Vientiane-Hanoi Vocational School
- Vientiane Province Vocational School

To learn from the experiences of other countries that is to say institutions in South East Asia and benefit from their expertise, the following target group consisting of "Members of the RCP-Platform" have also been involved in the development process:

- IBB / Tongji University (China)
- Universitas Pendidikan Indonesia (Indonesia)
- Burapha University (Thailand)
- Rajamangala University of Technology Thanyaburi (Thailand)
- General Department of Vocational Training / Ministry of Labour – Invalids and Social Affairs (Vietnam)
- Namdinh University of Technology Education / Ministry of Labour – Invalids and Social Affairs (Vietnam)

In different stages of the research project workshops were conducted with the involvement of the two target groups mentioned above. These workshops will be described briefly in chronological order in the following table (Figure 1):

| | |
|---|---|
| **20th February 2012**<br><br>**(Vientiane/Laos)** | **Ownership Workshop**<br>• Presentation of research project and proposal<br>• Presentation of already existing national standards, considered for analysis<br>• Presentation of initial results considering the analysis of already existing national standards<br>• Achievement of acceptance, ownership and support<br>• Draft of proposal to the Ministry of Education and Sports (MoES) to obtain the official assignment for the development of Standards for Vocational Teachers in Lao PDR<br>Target group:<br>• "Lao Stakeholders" |
| **24th May 2012**<br><br>**(Thalat/Laos)** | **Capacity Building Workshop**<br>• Further training in the field of development, implementation, and evaluation of national Standards (input: Dr Joachim Dittrich)<br>• Exchange of experience and expertise particularly considering the implementation of standards<br>Target group:<br>• "Lao Stakeholders"<br>• "Members of RCP-Platform" |
| **25th May 2012**<br><br>**(Thalat/Laos)** | **Continuing Research Workshop**<br>• Presentation and discussion of final results considering the analysis of already existing national standards<br>• Presentation and discussion of the initial draft of standards<br>• Advise and coaching by external expert (Dr Uwe Elsholz)<br>• Guidelines and recommendations for further development of the standards<br>Target group:<br>• "Lao Stakeholders"<br>• "Members of RCP-Platform" |
| **10th August 2012**<br><br>**(Bangkok/ Thailand)** | **Presentation of Research Work (within the context of the Annual RCP Meeting)**<br>• Presentation and discussion of the drafted standards<br>• Comments and recommendations particularly concerning regional specifics for further development of the presented draft<br>Target group:<br>"Members of RCP-Platform" |
| **18th October 2012**<br><br>**(Vientiane/Laos)** | **Acceptance Workshop**<br>• Presentation and discussion of the final draft of the standards<br>• Recommendations for a final revision of the drafted standards<br>• Acceptance and approval of the standards to be proposed to the Ministry of Education and Sports (MoES) in order to get the official authorization<br>Target group:<br>"Lao Stakeholders" |

Figure 1: Workshops related to the Development of Standards for Vocational Teachers

The theoretical work – the foundation of educational standards and the analysis of existing standards – and the carrying out of the workshops have alternated. The results of this cyclic process are now described in this study.

## 1.3 Outline of the Study

This first chapter consists of the description of the problem, the main objectives and the methodological approach of the conducted inquiry.

As a basis and background for the understanding of the study the second chapter contains a description of the vocational education system of Lao PDR. The major education policies and regulations concerning the implementation and evaluation of standards will be shown. In particular this chapter describes the situation concerning the qualifications of vocational teachers including its specific problems and challenges.

The third chapter comprises an examination of the foundation of standards. This includes the functions and different purposes of standards. In this chapter the characteristics of vocational education compared to general education are also presented. These characteristics concern the role of vocational schools compared to public schools and the specific skills requirements for vocational teachers. It is argued here why special standards for vocational teachers are required. At the end of this chapter questions will be presented for the analysis of existing standards.

Implementing the results of the third chapter, the fourth chapter describes, compares and analyses existing standards of teacher education. Standards for general teachers from England, Germany, Laos and the USA and vocational teachers from Vietnam will be analysed. The results of the analysis serve as a foundation for the developed standards for vocational teacher in Lao PDR.

To ensure the quality of the drafted standards they have been aligned with two important standard frameworks. The first alignment is with the "Information and Communication Technology – Competency Framework for Teachers" (ICT–CFT), first published in 2008 and updated in 2011 by UNESCO and the second with the 'Teaching Competency Standards in Southeast Asian Countries', published in 2010 by SIREP (SEAMEO INNOTECH Regional Education Program) will be described in the fifth chapter.

The sixth chapter contains the result of the development process - the Standards for Vocational Teachers at bachelor level in Lao PDR.

The seventh chapter deals with the implementation of these standards. Three key elements will be proposed and justified: An appropriate dissemination of the standards, the development of standard-based curricula, including the accomplishment of these curricula at the university, and the establishment of a concept of mentoring at the vocational schools.

The study ends with chapter eight, providing final remarks and suggesting possible future developments and needs of further research.

# 2 Current Situation of TVET in Laos

## 2.1 Structure of the TVET System

Lao PDR still belongs to the group of least developed countries despite a strongly growing economy over the last several years. In 2010 the gross domestic product has grown by 8.3 % (cp. U.S. Department of State) and from 2011 to 2015 an average growth of at least 8.0 % is assumed (cp. MPI 2010, 11). Apart from this solely economic development, the Lao government is continuing to meet its poverty-related Millennium Development Goals to be achieved by 2015 and is striving to leave its status as a least developed country by 2020.

One of the most challenging tasks for this ambitious timeline is the development of the Technical Vocational Education and Training (TVET) sector. On one hand it must absorb an increasing number of young girls and boys, leaving school ["population in working age (15-64 years) will increase from 3.76 million people in year 2011 to 4.10 million in 2015"(MPI 2010, 12)] and on the other this sector has to provide enterprises with the required labour force. "In the year 2015, there will be a demand of 3.26 million workers, but the workforce supply will be only 3.17 million (including 276,828 new workers, average 55,365 workers per year)" (MPI 2010, 16).

At the moment the TVET sector in Lao PDR is cannot meet with the expectations of the labour market in terms of both supply and demand. According to the Asian Development Bank, "The sector and labour market assessments indicate that

- TVET enrolments are declining in high-demand skill areas and where skill shortages are greatest (e.g., construction), and
- only a small proportion of companies recruit workers directly from TVET institutions and few companies have any relationship with TVET institutions" (ADB 2010a, 5).

Furthermore, the aforementioned assessments reveal, *"employer and trade association interviews indicated a strong negative image of TVET. It was repeatedly stressed that TVET graduates at all levels have to be trained again by the economic units. The training currently being provided in TVET institutions was considered to be exclusively theoretical, and delivered by teachers (sometimes graduates from the TVET school) who do not have the necessary work experience or real skills"* (ADB 2010a, 4). In the light of these reports it becomes all the more essential to separate the education of vocational teachers from their alma mater colleges in order to enable quality and evaluation at an academic level. Only then the vicious cycle can be interrupted in which poorly trained students stay at the same college to become poorly qualified vocational teachers to continue the insufficient training of a new generation of vocational students both perpetuating and even worsening the cycle.

A further difficulty is that vocational education, provided by the TVET-sector, increasingly falls short of the demand of the labour market. The labour market assessment identified "*five major sectors of current and apparently likely continuing skills shortages"* (ADB 2010b, 4): furniture, construction, construction sub-trades (masonry, carpentry, electrical, plumbing etc.), tourism and hospitality, mechanical maintenance and repair trades. The sobering forecast, identified by the assessment, is justified by the fact that the number of skilled workers required (certificate level), trained by public TVET institutions, has dropped in recent years. 407 of 13,065 students were trained in 2006/07 at certificate level, while in 2008/09 the number dropped to 68 of 17,926. A reverse in this trend cannot be expected in the near future. On the one hand, training in these trades is not attractive for young people, because it has a bad image, on the other, the schools are not keen on offering sufficient training, because it is too expensive, too difficult and has a bad reputation socially that reflects on them too. By contrast, higher diploma programmes (IT, business administration etc.) have become the fastest

growing component of TVET, despite an even faster growing surplus of graduates. It can be expected, therefore, that skilled workers must still be recruited from neighbouring countries, from Vietnam in particular, to fill the gap.

In summary it can be said that the TVET-sector of Lao PDR suffers from a bad image, due to its inability to cater to labour market needs and a lack of adjusting to market supply and demand - particularly regarding skill levels and the significant lack in the sectors where training is most needed - and an insufficient number of vocational teachers, whose qualifications are anyway considered less than sufficient for the market needs.

In the light of these aforementioned shortcomings and in its endeavour to pave the way for building a skilful labour force, the Government of Lao has made great efforts to reform the national education system as committed by the National Education System Reform Strategy (NESRS) 2006–2015. Four key focus action areas have emerged (cp. MoE 2008, 10):

- increase the length of general education to 12 years,
- access expansion and a quality and relevance improvement programme,
- implementation of teacher education strategy and action,
- the expansion of technical schools and vocational training.

Within the framework of NESRS 2006-2015 and the Education Sector Development Plan (ESDP) 2011-2015, TVET in Lao PDR is regarded as an integral and crucial part in prepare employment by training its labour force and technicians at various levels of the economy to be equipped with the necessary knowledge, ability, skills and attitude. This will contribute to the socio-economic development of the country, especially the 7th National Socio-Economic Development Plan (NSEDP) 2011-2015. TVET plays a crucial role in providing learning–teaching on the technical–vocational aspects in vocational education based on the levels and courses that can create a Lao workforce with the knowledge, skills, and attitude necessary for working entrepreneurially with the capability of running a business by oneself as required by the labour market.

At the moment 21 technical and vocational schools and/or colleges under the supervision of the Ministry of Education and Sports (MoES) are in charge of providing vocational education in Lao PDR. Vocational schools under the supervision of the MoES offer vocational qualifications at different levels (Certificate, Certificate Vocational, Diploma, Higher Diploma and Higher Diploma Continuous) and in different professions, ranging from Accounting to Welding & Plumbing. An additional number of public TVET facilities under the aegis of other ministries, mass organizations or administrations offer vocational education as well, not forgetting 321 Community Learning Centres and numerous private schools/colleges. Unfortunately comparable data is not available for all of these institutions. Furthermore, it must be considered that the table below (Fig. 2) does not clearly distinguish between academic and vocational education offers. Altogether the training facilities educate more than 50,000 vocational students per year.

| | **TVET Institutions** | **Number of trainees** | **Content of courses** |
|---|---|---|---|
| **Ministry of Public Health** | University of Health Science and 12 Nursing schools | In 2008/09 13 master degree, 52 specialists, 308 bachelor degree, 227 higher diploma, 90 diploma, 638 nursing certificates | |

| | | | |
|---|---|---|---|
| **Ministry of Finance** | 3 training institutes | In 2008/09 4,500 trainees in certificate and diploma courses | Finance; banking, accounting |
| **Ministry of Agriculture and Forestry** | 5 specialist training institutes | In 2009: 448 students graduated | Crop production, livestock, fisheries, forestry, irrigation |
| **Ministry of Information and Culture** | 5 training institutes | | |
| **Ministry of Justice** | 3 training institutes | | |
| **Bank of Lao** | 1 training institute | | |
| **Lao Women' Union** | 3 training centres | In 2008/09 440 trainees in non-formal courses | Cookery, garment, hairdressing, beauty, |
| **Lao Revolutionary Youth Federation** | 10 training centres | In 2008/09 900 trainees | Languages, beauty, tailoring, computing |
| **Community Learning Centres** | 321 centres across the country | 1,608 trainees in 2008/09 | Literacy, equivalency and short basic vocational skills |

Source: UNESCO 2012, 11

Figure 2: TVET delivery System under other Ministries and Organizations

In the following two chapters the structure and the characteristics of vocational education in Laos will be exemplified with reference to TVET education under the supervision of the MoES and the MoLSW.

### *2.1.1 Technical and Vocational Education and Training (TVET) under the supervision of MoES*

According to the amended education law 2007, TVET consists of following levels:

- Basic Vocational Education at certificate level is vocational education comprising a training period of 6 months to 3 years for graduates of lower secondary school or the equivalent.
- Diploma level is technical education for graduates of certificate level through a continuing programme over a period of 1-2 years, whereas the regular programme covers a period of 2-3 years for a graduate of upper secondary school or the equivalent.
- High diploma level is technical education for diploma graduates over a period of 1-2 years of a continuing programme, whereas the regular programme is over 2-3 years for graduates of the upper secondary school or equivalent.

To enforce the education law as well as the labour law, the MoLSW and MoES have modified the Lao TVET system according to the Prime Minister's Decree on TVET and Skills Development as follows (PMO 2010, Art. 13) and displayed in Figure 3:

1. Basic vocational education is vocational education for those graduated in lower secondary school, divided into regular and continuous or linkage courses and programmes as follows:

i. Regular courses and programmes for the lower level requires 3 years of learning;

ii. Continuous courses and programmes for the lower level applies an integrated form of vocational training, divided into 4 levels such as certificate 1, certificate 2; certificate 3 as a semi-skilled worker, and certificate 4 designates a skilled worker.

2. Middle vocational education is technical and vocational education for those, graduated from upper secondary school, divided into two different courses and programmes such as regular and continuous or linkage courses and programs as follows:

   i. Regular courses and programmes require 2–3 years of learning for those who have completed upper secondary school or the equivalent based on the specialized courses and programmes;

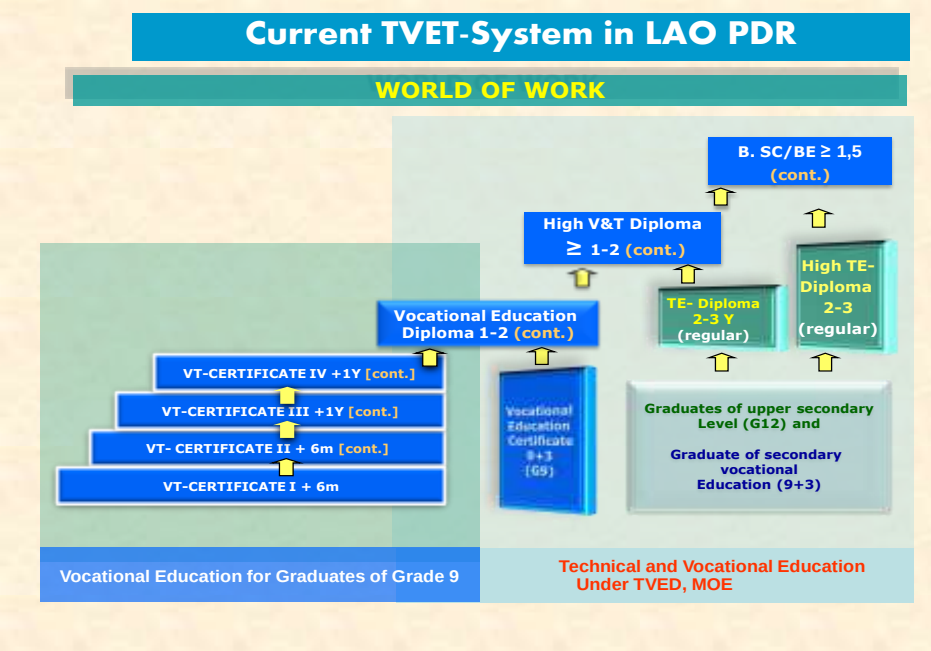
   ii. Continuous or linkage courses and programmes requires 1–2 years for those who have completed lower grade 4 or skilled vocational education based on the specialized courses and programmes;

3. Higher vocational education is technical–vocational education for those who have completed secondary school or equivalent and is divided into two different courses and programmes such as regular and continuous or linkage courses and programs as follows:

   i. Regular courses and programmes for high level requires 2 – 3 years of learning for those who have completed secondary school based on the specialized courses and programmes;

   ii. Continuous or linkage courses and programmes for high level requires 1 – 2 years for those who have graduated from all types of medium vocational education based on the specialized courses and programmes;

Aside from TVET in the high vocational education, it can also be taken on through the higher continuous or linkage courses and programmes.




Source: cp. PMO 2010, Art. 13, 14, 19

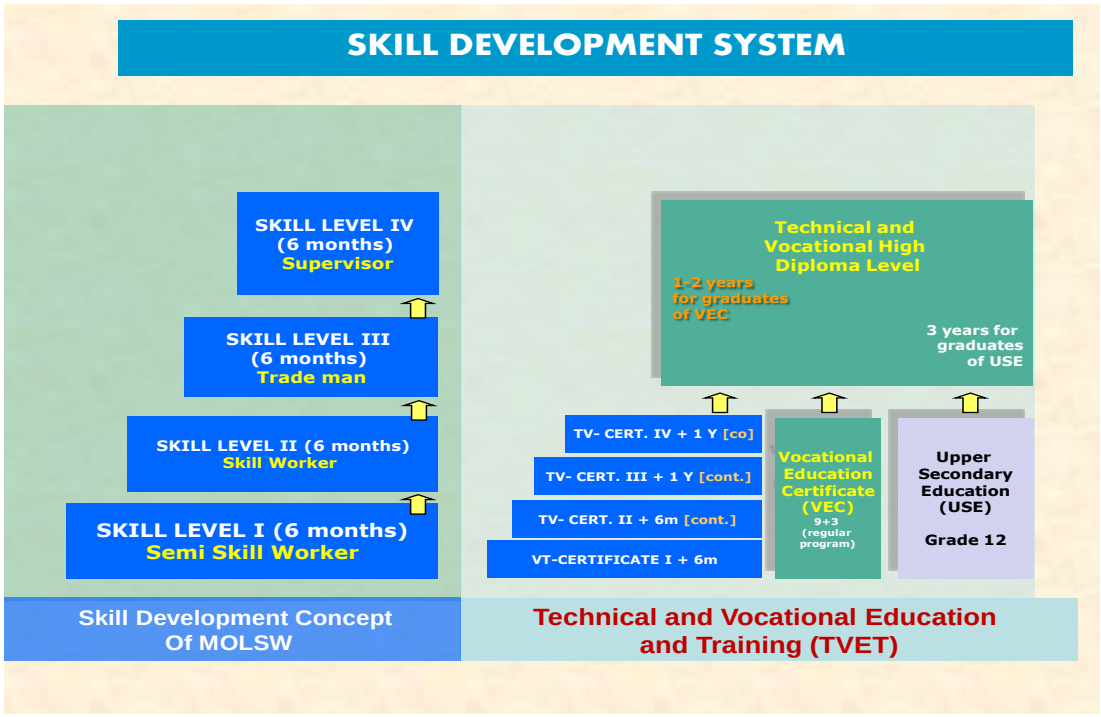
Figure 3: Current TVET-System in Lao PDR

At the same time, an integrated approach of TVE was adopted. The Integrated Vocational Education and Training (IVET) refers to a technical and vocational sub-system, dealing with different types of education and training such as TVET, basic VET and basic skills training as a whole. In addition, the dual cooperative training approach has been developed and is in the process of pilot testing.

### *2.1.2 Skills development under the supervision of MoLSW*

Skills development set out to upgrade the skills and attitudes of the Lao workforce. They acquired a basic vocational level blended with previous experience to gain more expertise and implement workplace discipline and upgrade their technical and technological skills for participating in skills competition or skills assessment and certification according to skilled-trades standards at national, regional, and international levels (PMO 2010, Art. 3).
The structure of skills development consists of (see also Fig. 4):

1. Basic skill level: learning period is six months or less, for a person who has never obtained any vocational training courses;
2. Skill level I: semi-skilled vocational courses and programmes with learning period at six months, for general target groups;
3. Skill level II: skilled vocational courses and programmes featuring a training period of 6 months, for those who passed the skills testing or assessment at level I with one year experience in relevant jobs;
4. Skill Level III: mechanics/engineer/tradesman courses and programmes featuring a training period of six months, for those who passed the skills testing or assessment at level II with one year experience in relevant jobs;
5. Skill level IV: supervisor courses and programmes featuring a training period of six months, for those who passed the skills testing or assessment at skill level III with a minimum of two years' experience in relevant jobs.




Source: cp. PMO 2010, Art. 13, 14, 19

Figure 4: Comparison of TVET and skills development

Aside from MoES and MoLSW a variety of TVET institutions exists, supervised by different ministries, such as the Ministry of Public Health, the Ministry of Agriculture and Forestry etc. or administered by one of the mass organizations, e.g. the Lao Women' Union.

### *2.1.3 Issues and challenges*

At the moment, there is lack of overall national qualifications framework (NQF) in Laos that relates to all levels of education, training and qualification and identifies the pathways between them. In some cases, there isn't even a framework exist for the programmes of single providers or authorities. However, the Department of Technical and Vocational Education (DTVE) has made a strong effort to develop the Lao Vocational Qualification Framework (LVQF) that is considered as the fundamental document for the introduction of a Competency Based Training (CBT)–Approach as well as the development of National Skills Standards, curricula, training packages and an assessment standard.

Despite greater efforts made by the government for strengthening TVET, especially the endorsement of relevant strategic and master plans, a significant legal framework including its implementation, means TVET-quality of Lao PDR remains low compared to its neighbouring countries. In addition, TVET is not yet fully accessible for the poor target groups, especially in rural and remote areas. The National Education System has not yet been able to respond to the socio-economic structure of the country. Furthermore, the reputation of TVET – as described above – is very low. As a consequence too many people choose an academic education, regardless of the fact that TVET has already been considered to be one of the most crucial preconditions for economic development and poverty reduction.

## 2.2 Major education Policies

The previous chapter described the current state of the TVET sector. To get an idea of what efforts the education administration has undertaken for preparations for the future, two main elements of Lao education policy are discussed below.

### *2.2.1 The current State of the National Qualification Framework (NQF)*

Regarding the national education reform phase I (2005-2010) and phase II (2011-2015) the idea of having a National Qualification Framework (NQF) in Lao PDR has been discussed and debated at various meetings over the past decade in with the purpose of enhancing the relevance and quality of education, and in particular vocational education. To facilitate the process the Prime Minister has issued a decree to set up a National Training Council (NTC)[2] and with a view to NTC president of has set up several Trade Working Groups.

The MOES has, however, a strong commitment to strengthening TVET in terms of quality improvement, increasing equitable access and strengthening administration and management. Hence the National Education System Reform Committee (NESRC) Meeting on TVET and High Education Reform was organized from 12th to 13th June 2012 in Vientiane Capital. The members of the NESRC basically agreed, upon the proposed National Qualification Framework, illustrated below.

2 NTC was established in April 2002

| Qualification Level | Higher Education and Sport (MOES) | TVET (MOES) | Skill Training (MOLSW) |
|---|---|---|---|
| 7 (professional) | PhD | | |
| | Specialist 2 | | |
| | Master's Degree | | |
| | Specialist 1 | | |
| | Graduate Diploma | | |
| 6 | Bachelor's Degree | Bachelor's Degree | |
| 5 | Associate Degree | Higher Diploma/High Technician | Foreman/supervisor/**Skilled Level 4** |
| 4 | | Diploma 2/Technician | Trades man/**Skilled Level 3** |
| 3 | | Diploma 1/Certificate 4/skilled worker | Skilled Labour/**Skilled Level 2** |
| 2 | | Certificate 3/Semi Skilled | Semi Skilled/**Skilled Level 1** |
| 1 | | Certificate 2/Practical Skills | Award |
| | | Certificate 1/Basic Skills | Award |

Figure 5: National Qualification Framework (Lao PDR)

The NQF (Fig. 5) will serve as a reference point and translation grid for all qualifications throughout the country that will benefit employers, education providers and job seekers in terms of recognizing qualifications issued within the country. If backed by a good system of quality assurance, they can support the development of workers' skills, facilitate education and labour market mobility, and help improve the access of individuals to higher and varying levels of education and training throughout their lifetime.

For further introduction of the CBT-Approach, it is necessary that MoES, in particular the DTVE strive to propose the Lao Vocational Qualification Framework with its level descriptors implying the following five aspects:

1. Knowledge and understanding,
2. Practice: applied knowledge and understanding,
3. Generic cognitive skills,
4. Communication, ICT and numeracy skills,
5. Autonomy, accountability and working with others.

The particular levels and the accordant descriptors are displayed in "National Qualification Framework – Aspects and Descriptors" (see Annex 2).

To implement this NQF the Ministry of Education and Sport and Ministry of Labour and Social Welfare in close cooperation with international organizations and donors e.g. ILO, ADB, German Development Cooperation, etc. get to the stage whereby they can create instruments and classify qualifications according to a set of criteria for levels of learning outcomes.

The development of NQF will help Lao PDR to achieve better results and impact education reform by shifting the content of education and training from the control of providers towards content related to the achievement of knowledge and skills required in particular occupations as perceived by industry stakeholders, particularly in vocational education and training. This movement towards standard-based learning outcomes necessitates different forms of quality assurance for qualifications. Simultaneously it will create better opportunities for recognizing previous knowledge appropriate to further learning, regardless it having been acquired in a formal, non-formal or informal way.

At the moment Lao PDR is in the process of transition from a 'central planned economy' to a 'free market oriented economy', and faces the great challenges of becoming more and more integrated into the ASEAN community. The successful implementation of ESDP in general and the TVET strategic plan 2006-2020 combined with the Master Plan of 2008-2015 in particular, will make essential contributions to the 'breaking-through' policy of the party and government designed. The latter is designed to radically implement human resource development and reduce poverty, by industrialising and modernising the country, finally enabling Laos to cast off its status of a least developed country by 2020.

### *2.2.2 Regulations of the Education Sector Development Framework (ESDF) concerning the implementation and evaluation of standards*

The Ministry of Education and Sports (MoES) recognizes the need for improved sector-wide planning to address key deficiencies across the education sector. The Ministry is keen to have a balanced approach to education sector development to ensure investment in the national education system applies nationwide, is scientifically verified, generally comprehensible, standardized and evenly distributed. This will overcome education system disparities that prevent a sustainable and balanced education sector development. A sector-wide framework leading to a single and agreed education sector-wide approach will enable the government and development partners to plan according to agreed outcomes and targets within an annual implementation plan. This will allow all stakeholders to adopt a long-term strategy for the support of the sector with investment planning captured within a single resource and funding envelope (cp. MoE 2009, 8).

The Education Sector Development Framework (ESDF) is intended as a major education sector plan for Lao PDR. It draws upon the 8th Party Congress Resolution that clearly defined education to be the core of human resource development as well as a number of key policy documents. These included the Vientiane Declaration of Aid Effectiveness (2006), the new Education Law (2007), the National Education Sector Reform Strategy (2006-2015), the Education for All Action Plan (2003-2015), and the seventh National Socio-Economic Development Plan (2011-15) etc.

Regarding employment-oriented and sustainable development of TVET the ESDF emphasises key government policies in support of vocational and post-basic education and formulates it in ESDF as well as the:

- Expansion of the role of the National Vocational Council;
- Setting of new education and training standards for the vocational training and technical education syllabus including new curriculum programmes that meet with societal demand;

- Development of degree level courses for TVET teachers in training;
- Strengthening of relations between TVET colleges and private and public sector enterprises;
- Provision of occupational training;
- General expansion of opportunities for students to enter upper secondary schools, vocational schools/colleges and university;
- Expansion of TVET colleges and opportunities for upper secondary school graduates to continue formal training through post-secondary TVET colleges; and
- Installation of at least one qualified integrated TVET College in each province.

The ESDF does not describe or specify any details concerning the implementation and evaluation of standards. Instead the central government and the Ministry of Education and Sports has been drawing up and approving several regulations related to the implementation of standards summarized in the ESDF ('Education Sector Development Framework (ESDF) – legal Regulations' see Annex 3)

## 2.3 Current situation regarding the education and qualification of TVET Teachers

To provide the TVET institutions, described in chapter 2.1, with qualified teachers, the first study programme for vocational teachers at Bachelor level was established in September 2004 at the Vocational Teacher Training Division (VTTD) at the Faculty of Engineering (FE) / National University of Laos (NUoL) supported by the Lao-German HRDME programme (Human Resource Development for a Market Economy). By order of the MoE (cp. MoE 2011), VTTD has been upgraded to Vocational Teacher Education Department (VTED). This means greater autonomy in personnel, academic and financial matters. At the same time it also means more responsibility and increased expectations. During government negotiations in May 2010, the governments of Lao PDR and Germany agreed upon a new project of technical cooperation in the fields of private sector development and vocational training. This project encompasses a component, which supports VTED in re-designing its study programme for vocational teacher education. The objective is not only to train qualified teachers needed for the expanding system of vocational education, but also to provide the opportunity that such personnel can also assume positions of management or administration within the TVET-sector.
Aside from VTED two further institutions are in charge of the education of the vocational teacher. The Vocational Education Development Centre (VEDC) has been educating vocational teachers since 1999, albeit at the non–academic level of the Higher Diploma. Unfortunately, despite noteworthy national and international efforts and good progress, neither VTED nor VEDC are able to supply a sufficient number of well-trained teachers (less than 50/year). To alleviate the lack of well-trained teachers, not only VEDC but also several vocational colleges/schools, have been authorized by Ministry of Education and Sport (MoES) decree to train vocational teachers up to bachelor level (continuing education) as well. Despite being authorized by the Ministry, these approaches have evolved in an uncoordinated manner disregarding commonly recognized standards.

In demand-driven vocational education systems, educational institutions receive signals as to which qualifications are in demand from enterprises and/or administrations and to what level an educated labour force is required. Regrettably Lao PDR does not offer an effective labour market information system. *"The study noted that a critical weakness in the Lao PDR . . . [is] the absence of up-to-date market information, so that it acted as a constraint to economic planning and to the effective operation of the Technical Vocational Education and Training (TVET) system."* (Nam news Network 2010) Even within the responsible ministries reliable information is rarely available. What this implies is illustrated by the following example. For the school year 2008/09 the MoES officially reported 1,065 teachers,

working at vocational schools. For the same period a MoES-internal calculation counted 1,206 vocational teachers, a discrepancy revealing 13 % more than officially reported.

Nevertheless a survey in close cooperation with VEDC had been conducted in 2007, using these numbers to calculate teacher-student ratios. This survey revealed that on average one single teacher had to teach about 13.69 students in the 2006/07school year. "Taking the student-teacher ratio into account it becomes obvious that the schools [in school year 2006/07] in general rely on a sufficient number of teaching staff. With the exception of TVS Champasak, TVS Luang Prabang, TVS Savannaket, and TS Vientiane Province, one teacher counts for less than 15 students, which is a quite an agreeable ratio." (Sisoulath et al. 2007, 37) Three years later, in school year 2009/10, the teacher-student ratio on average remains comparable (14.20).

Just recently, the above mentioned figures were confirmed:

According to reported figures, the student-teacher ratio at vocational schools looks like the following: There is one teacher teaching 33 students at Polytechnic College, one teacher teaching 30 students at Pakpasak Technical College, one teacher teaching 8 students at Lao - German Technical School, one teacher teaching 3 - 4 students at Houaphan Integrated Vocational Education School and so on. The ratio between teachers and students is not balanced and this problem is difficult to solve. Standards, describing the required qualification of vocational teachers, are not available yet. These standards are crucial in terms of educating skilled workers, according to the demands of the national and regional labour markets. (cp. Thongdaeng Sihalath 2012, 1).

Until now there has been no specification of a target ratio of students to teachers for vocational education in Laos. In 2007 the World Bank in conjunction with the MoES formulated the following numbers applicable to general education: *"The Teacher Education Strategy for 2006-2015 and the Teacher Education Action Plan for 2006-2010 (TESAP) lay out specific targets in the area of ensuring adequate teacher supply and training. Among these are student-teacher ratios of 20:1, 30:1, and 27:1 in pre-school, primary and secondary respectively."* (Benveniste 2007, 102) Since April 2012 the Prime Minister's Decree No. 177 specifies the number of students per teacher for the following kinds of educational institutes (cp. PMO 2012, Art. 11):

- Pr- school 15:1
- Primary School 34:1
- Lower secondary school 30:1
- Higher secondary school 25:1
- Vocational school 20:1
- University 30:1

On average, vocational schools in Laos have already achieved this goal, even if a few schools are above these targets. Obviously the teacher-student ratio in general reflects a quite unequal distribution than any severe shortage of teaching staff in general. It can be assumed that the rural exodus, which is also an issue in Laos, is noticeable in vocational schools as well.

The previous chapter pointed out that Laos has a huge demand for skilled labour to develop its society and economy. However, an insufficient number of well-trained vocational teachers are available to train this qualified work force required by a rapidly growing economy. First and foremost VTED is responsible for the education and training of vocational teachers at bachelor level. Between 2007/08 and 20011/12, 113 students graduated successfully from VTED.

To be able to make qualified statements about the quality of vocational teacher education at VTED, a tracer Study was carried out in 2010/11 (cp. Soysouvanh 2011, 13-27). This study followed the aforementioned graduates of VTED providing insight into post-graduate development and experiences. Its aim, amongst many, was to comprehend how former students evaluated their studies in retrospect and what content in particular was important for their professional development. The results of this survey should enable VTED and all institutes of higher education involved in the training of vocational teachers in Lao PDR to indicate deficits in present study programmes and serve as a basis for future changes. This information is useful for the planning and accomplishment of further development of curricula. For that reason information on the graduates' professional success is needed as well as the findings regarding the relevance of knowledge, skills and information on curricula and study conditions.

The first objective of the survey was to find out where the selected graduates were working irrespective of their current occupation. The authors assumed that more than 50% of the graduates would have found employment in the field of vocational education. If graduates did not find work as vocational teachers what were the reasons behind such failure? The results confirmed the assumption in part and revealed only 41.67 % of the interviewed graduates to be teaching at a vocational school. Asked to give the reasons why they were not working teachers, some graduates said they had applied, but had not been accepted. Other individuals stated that they chose not to work as teachers due to unsatisfactory work conditions. One of these respondents pointed out (e.g.), that the status of a full-fledged employee within public schools is achieved only after 2-3 years of work experience. Whereas his/her current employer awarded such status the moment employment began. It is also likely that a so-called quota system that regulates both access to higher education and the transition of graduated vocational teachers into professional life prevents or hampers the recruitment of teachers. This may explain why, in considering the high demand for vocational teachers and the relatively low supply of graduates, less than half the graduates found appropriate employment. In addition, those schools that showed great interest in employing graduates often do not have enough positions available and/or lacked the necessary financing.

The second objective centred on the practical relevance of teacher training; it is considered essential the training of vocational teachers should adopt a "dual approach". To ensure practical relevance, it is important that future teachers participate as soon as possible in "on-the-job-learning" both in enterprises and in schools. Curricula of vocational education at Bachelor level should emphasize internships at vocational schools as well as in companies in order to allow students access to more practical training (e.g. maintenance of technical equipment). The graduates themselves certified they did not receive enough practical training. They were lacking sufficient practical exercise and internships linking their major subject their vocational education and all in all did not feel, well prepared for professional life. In particular, they demanded an improvement in practical exercises for the preparation and carrying out of actual lessons. To meet with these demands a significant extension of time blocks of dedicated to practical training is essential. Two internships – in enterprises and schools – each of four weeks duration are clearly not sufficient in providing sustainable practical experience. Furthermore, university training does not always meet state guidelines. Respondents reported that courses were often cancelled for a variety of reasons and that when they did take place they were not always in accordance with the curricula requirements.

To educate a successful self-motivated, self-confident and independent work force, innovative, creative and supportive teachers are required. Hence, the third objective focused on graduates' motivation in vocational education. The results showed that at least half of the graduates had initially chosen vocational education due to personal interest in the subject. It was also admitted that some of them were persuaded not to become a teacher. Now more than ever it seems necessary to significantly improve the

conditions under which teachers have to work in Laos. As anticipated, graduate working in private companies, earn an annual income, on average, three times higher (21,000,000 LAK ≈ 1,800 €) than the annual income graduates who take home either as teachers (7,016,600 LAK ≈ 600 €) or in public administration (6,126,667 LAK ≈ 520 €). This affects, aside from other aspects, the principles of employment opportunities, the level and structure of salaries and the chance to get ahead. It appears to be common practice for teachers to work overtime to improve their income. One can understand how this is brought about by such low income but this forms a great obstacle to the recruitment of much-needed young talents as well as deteriorating the quality of teaching. Firstly such teachers have little opportunity to prepare their lessons suitably. Secondly the classes are too large to provide high-quality teaching. If this situation remains candidate selection will be condemned to accepting applicants highly reduced dedication to vocational teaching. The first step in the right direction has been achieved in carrying into effect the aforementioned Prime Minister's Decree No. 177. This document creates the legal basis for the regulation of many aspects related to the profession of teachers. For instance it clarifies which institutions are in charge of teacher education, describes different models of teacher education, defines different groups of teachers and in particular stipulates teacher-student ratios (see above), teach loads, incentives and salaries for different kinds of teachers. This means vocational teachers, should not have to teach more than 20 students per class, teach a 14 hours per week and earn a salary 15% higher than the basic income. Furthermore each teacher has to be evaluated once annually and as an additional incentive the decree provides – for those obtaining a higher-than-average result – an upgrade within the salary structure. The future will tell us if these regulations are enough to motivate highly dedicated and qualified young people and lure them into vocational teaching.

Finally the fourth objective of the survey aimed at the relevance of academic education for the professional career of the graduates in general. All respondents stated that their job required an academic degree. For the majority of respondents their occupation was directly related to their major subject. Combined with the fact that more than 80% of the respondents found an occupation within 6 months of graduating, the results demonstrated that the studies are of significant relevance to the graduate's professional development.

In summary, it can be stated that the graduates value general studies as highly beneficial, even though preparation for the professional life of a vocational teacher has to be improved significantly. Furthermore it has become quite clear that a more improvement in the study course and work conditions are essential in providing a TVET system in Lao PDR providing a sufficient amount of well-trained vocational teachers.

# 3 Standards of teacher education

As described above, there is a lack of well-qualified teachers in vocational schools in Laos. There are different approaches worldwide for improving the quality of education systems due to the formulation of standards (cp. Bergmann/Mulkeen 2011). Besides the formulation of standards for degrees in general education and vocational training, teaching standards are also becoming more prevalent. Thus this chapter is to describe the concept of standards and discuss several goals that can be pursued regarding standards. After showing various aspects of standards important issues will be developed for the analysis of existing standards in the chapter following.

## 3.1 Purposes and use of standards

In the initial general approach a standard can be seen as a norm, meaning the definition of the quality of something. Technical standards define, for instance, the attributes of a technical item, such as its dimensions, tolerance and condition of its material. Furthermore they define the way something should be calculated, or the procedure to be applied for solving a certain problem. If technical standards define tolerances of attributes, then care must be taken, not to violate these tolerances. The definition of a technical standard normally implies, that compliance with the standard can be verified. This usually also applies to educational standards, but it is far more difficult to control the observance of these standards.

The term "standard", when used in the context of education, has no strictly defined meaning and often leads to misinterpretations. According to Bergmann and Mulkeen (2011, 14) *"(...) it carries a variety of meanings in different contexts. The term standard can mean (i) a norm, (ii) a requirement, or (iii) a quality measure. Each of these uses implies a quality benchmark, but the level of compliance implied differs. A norm refers to a quality level that is expected or commonly used, but is not applied in all cases. A requirement implies that compliance is mandatory. A quality measure does not imply enforced compliance and may refer to a graduated series of benchmarks against which performance can be measured."*

Educational standards can be grouped into three types according to the areas they address, namely:

- Institutional standards, covering issues such as the organization of an educational institution, human resources, material resources such as rooms, and equipment, and the institution's vision and mission.
- Process standards, covering curriculum aspects, volume and content of instruction, as well as forms of learning, often including regulations regarding learners' assessment.
- Personal standards, which in conclusion are used to assess whether graduates have developed the competences and the knowledge they are expected to have attained.

Also in terms of grouping there is no commonly agreed pattern and a variety of layouts can be found. Bergmann and Mulkeen (2011, 15) for example use

- Input standards, defining resource inputs.
- Process standards, related to the processes in education.
- Outcome standards, referring to learning outcomes or educational achievement.

Therefore, when developing educational standards or working with standards, it is necessary to define what type of standards is being addressed and what purpose the standards should serve. In terms of these categories it is the study's objective to develop *outcome-oriented personnel standards*.

Educational standards are used for three purposes, namely (cp. TT-TVET Consortium 2009; Spöttl 2009)

- for supporting the quality development of educational programmes,
- for creating a common understanding of the quality and content of an educational programme,
- and as a basis for the mutual recognition of study achievements between different educational institutions.

Klieme et al. (2007, 9f.) suggests the following understanding of standards: Standards define common goals for educational institutions and they are used to evaluate educational outputs in the context of education monitoring and school evaluation. They explicitly discourage the use of educational standards as a basis for individual students' assessment or certification. On the other hand, standards like the INTASC-Standard of the United States, uses its standards for teacher certification (cp. CCSSO 2011, Chapter 4). So, when developing standards the stakeholders should agree and be aware of what purposes the standards should serve.

Educational standards usually define requirements regarding a certain item such as equipment, educational content or competences. Educational standards are only meaningful, if the related indicators can be checked. As educational standards can be met or achieved to a lesser of a larger extent, scales must be attached to each item to define levels of achievement. Regarding competence standards in particular this poses a major challenge: when defining a standard there must be an appropriate measurement method to assess upon which it can be decided whether or not the standard has been met. Should such a method not be available, an appropriate method has to be developed before the standard comes into effect.

The standards, developed in this study, should be conductive to the development of curricula for the training of vocational teachers. The standards are applicable for supporting the quality of the education of vocational teachers, but they are not designed for testing and certifying teachers in the first instance. (see chapter 1.2)

### *3.2.1 The Development of educational standards*

Personal standards describe the competences a person should have either when graduating from an education programme or when considered for a job, depending on the purpose of the standards anticipated. Competence here denotes the capabilities, skills, and attitudes a person has at his or her disposal for accomplishing a teacher's duties (cp. KMK 2004, 4). Standards development can be based on two models.

The first model describes the job profile and the related duties of a teacher. Depending on the national setting there may be different types of teachers such as assistant teachers, head teachers, theory teachers, practice teachers, skills trainers, etc. In addition, the teacher's job is confined only to teaching but to duties such as curriculum development, school development, supervision and counselling, students' assessment and so on.

From these duties the second model, a competence model for this specific type of teacher, can be derived. Usually, distinct competence areas are defined, and in each competence area, single competences are listed. This can be seen for example from the current German teacher educational standards (cp. KMK 2004). It must be noted, however, that teacher competence is a holistic competence, which cannot be split into parts, and that valid competence models emphasize the interrelatedness of the individual standard items. Single, separated competences do not automatically add up to the holistic competence that is characteristic for a professional teacher.

Setting educational standards is also a political process. It is necessary to integrate the various national stakeholders into the process of developing the standards as soon as possible (see chapter 1.3). Gerds (2009, 1409) emphasizes here that it is essential to refer "(…) to the particular cultural, economic and work-related environments in different countries and economies". This means regarding the education of teachers for technical and vocational education and training (TVET), standards should reflect the national job profile(s) of TVET personnel, the underlying philosophy of TVET, and the country's societal development model.

### *3.2.2 Measurability of educational standards*

Initial teacher education prepares the grounds for the later development of professional teacher competences. Accomplished teaching competences, however, are only achieved over the long-term, as, in addition to theoretical knowledge, they require extensive practical experience combined with reflection and continuous learning (cp. KMK w/o year, 8ff). Thus if the intention is to assess competences against standards, it is necessary to provide indicators or scales for each standard item to make assessment possible. If standards are intended to raise awareness of teacher education institutions or define a philosophy of teacher education, and assessing whether they are achieved is not the intention, indicators and scales may well not be required.

German teacher standards (cp. KMK 2004, 7ff), for instance, identify eleven competences and each of these competences there is a defined standard to be met following the first phase and after the second phase of teacher education (see chapter 4).

Gerds states: "teaching is an extremely complex, partly open and partly hidden process. It cannot be assessed sufficiently only by the use of numerical psychometric data, but must also be considered through interpretative processes that remain open for responses and discourses with the candidates" (Gerds 2009, 1408).

Assessment schemes hereby must focus on the ability of teachers to cope with the complex requirements of their profession rather than test against separate standard items. Assessment schemes must be based on complex professional tasks, which are simultaneously derived from the competence model and professional practice.

### *3.2.3 Verification of educational standards*

A main purpose in introducing educational standards normally is to improve the quality of education, and frequently in a qualitatively problematic situation. Improvement processes, however, require inputs and take time. Static standards such as those used almost everywhere in the world, are designed to check, to what extent or level the respective standard has been achieved. This poses problems at both ends of the scale, and also for improvement processes. If the minimum level has not been reached, the individual or the institution has failed. If the maximum level has been reached, no further improvement is necessary. For all achievements below maximum, static standards do not consider measures implemented for improving quality, but that have not yet yielded results. Open, dynamic educational standards, as developed in the field of TVET (QualiVET Project Group 2007) and later adopted for TVET teacher education programmes (TT-TVET Consortium 2009), try to circumvent these shortcomings.

Once put into force, it is advisable to monitor and evaluate, whether the implementation of the scheme actually leads to the intended results, to judge whether unintended or unwanted side effects occur, and see if the scheme needs improvement. Such monitoring and evaluation should be intensified during the phase of implementation and run at regular intervals during operation. Monitoring and evaluation

should be carried out in an independent manner to assure the results are objective and independent of interests serving the groups of actors involved. For the implementation and the further development of the standards see chapter 7.

## 3.3 Impacts of standard-based teacher education

Hattie (2009) shows in his extensive meta-study that it is the teacher who makes the difference in the students' learning achievements. Even though his findings are generated mainly from data on general education teachers and students, there is no evidence to suggest that in school-based TVET the findings would deviate to any significant degree. Thus, increasing the quality of teachers, i.e. their competences will lead to increased educational quality and improved educational output.
The targeted advantages of standard-based teacher education can be summarized as follows: well and appropriately designed teacher education standards are assumed to make for improved teacher education, better-educated teachers, able to execute their profession more successfully. This increased capability on the part of the teachers is far more likely to lead to better result in students' learning.

### *3.3.1 Input-based versus output-based teacher education*

In most cases the discussion on standard-based education is associated with a shift from input towards output orientation. The same applies to the discussions on teacher education.

Beck (2005) differentiates between two types of competence standards.

Type 1 is a list, defining competences as latent knowledge and abilities, which potentially could enable the teacher to act professionally. The problem with this type of standards is firstly that the items concerned are usually not measurable, and secondly that it is not clear if they are actually applied to a professional teacher's act of teaching.

Type 2 defines good practice patterns for the acting of a teacher in a number of contextual constellations, which are – based on scientific findings – expected to lead to good learning results. Here the measurability depends on whether it can be observed the teacher applies such patterns.

In any case Beck criticizes competence standards, i.e. output-based definitions, for the fact that teacher education institutions are left alone to decide which input to choose in terms of knowledge, resources, teaching and learning methods, etc., for developing such competences in their students. He also argues that the teaching profession requires "professionals" qualified in the same way as skilled workers, people who continually face situations, where they are compelled to find individual solutions based on their knowledge, experience, and professionalism. To accomplish this they have to rely on the appropriate knowledge, theories, procedures and tools and their mastery, that are best imparted in an input-based setting.

### *3.3.2 Undesired effects of standards*

Gerds (2009, 1409) notes that teacher educational standards can create a dogma in the terms of "the only legitimate view of teaching". The establishment of such a dogma could set a fixed standard of quality from which deviations are not allowed, either in a good or bad sense, and perhaps may not pay any heed to local adaptation needs or future scientific findings. Standards, once achieved, might inhibit desirable developments if they have not been foreseen in the process of their creation.

On the other hand it can be seen from various examples, e.g. United States or England that the implementation of teacher standards, at least initially, can lead to a surge forward in quality

development. At any rate, standards for TVET teachers should be formulated in such a way, that they do not restrict the necessary adaptation of vocational learning to the variations of local economic setting, different cultural backgrounds, or economic developments.

## 3.4 Specific vocational versus general standards

While the previous subsection deals with the issue of standards from a relatively general point of view, this section applies a more specific view regarding personnel for technical and vocational education and training. Hereby the term teacher in this subsection means exclusively TVET teacher, except when stated otherwise.

As stated above, teacher competence standards can contribute to teacher qualification becoming more transparent, to initiate quality development processes in teacher education, and to assure a certain competence level of teachers. This also applies to TVET teachers.

The quality of TVET output, however, (here is where it differs from general education) cannot exclusively be measured against academic achievements regarding a school curriculum. Instead, the ultimate sign of TVET quality is how well its graduates perform on the labour market. In many countries, especially developing countries, school-based TVET is proven to be of little relevance to the labour market. This also applies to Laos (cp. UNESCO 2012, 62ff.).

One important reason for this is inappropriate curricula, another - teachers with too little experience and knowledge of the world of work (cp. UNESCO 2012, 65). In such a situation a shift in the philosophy of TVET is required, bringing TVET closer to the reality of the world of work. Appropriate teacher standards are one of the means for supporting the respective change processes.

Standard setting or developing bodies have to decide if they want to develop and implement general standards for all teachers, or to develop specific standards for vocational teachers. Help in making the decision can be provided by looking at the role of vocational schools and the work environment of vocational teachers compared to that of general teachers.

### *3.4.1 The role of vocational schools*

Subject areas differ considerably between general and vocational education. General education teachers know their subject already from their own experiences as a school pupil, whereas vocational teachers' subject areas are related to the world beyond school - to the world of work. Work process knowledge (cp. Fischer/Boreham 2009), which should be the core of a vocational subject area, refers to real work environments, that are rarely if ever found in a school environments. The world of work changes rapidly over time. This not only refers to the all-too-often emphasised deterioration and growth of professional knowledge but also to the nature of work (cp. Billet 2009a, 179-183). In developing countries particularly it also refers to the implementation of new management and the division of labour concepts and to increased quality requirements in production (cp. Dittrich 2010). General education subjects usually do not show such high dynamics.

In general education students mainly have to be prepared for continuing their educational career while TVET has to prepare students for the challenge of earning livelihoods and that of their families in the world of work. When graduating from TVET students should have matured to become responsible adults while general secondary schools usually leave this step in development to subsequent educational institutions.

Vocational schools are increasingly challenged to play an important role in regional innovation systems, be it as a centre of excellence, or "just" cooperating intensely with actors within the economic sector.

As such they are part of the economic system and have to cultivate a means of cooperation with the respective actors and stakeholders. By comparison, cooperation partners of general schools are invariably students' parents or other educational institutions.

### *3.4.2 The job profile of vocational teachers*

In part the job profiles of general subject teachers and vocational teachers are fairly similar, for both have to develop, plan, implement and evaluate instruction, assess learning outcomes, participate in the development of education programmes, create appropriate and adapted learning environments, and participate in school development processes. For vocational teachers some of these areas of duty show specific characteristics, and additional ones (cp. Hartmann 2012; Spöttl/ Becker 2012).

The major share of teaching refers to occupational tasks and the knowledge, skills and attitudes required for accomplishing them. The teachers therefore need a profound knowledge of the occupational tasks and how they are embedded in the work and business processes of the economic or industrial sector for which they educate their students. Ideally they themselves should be able to accomplish such tasks at an appropriate level of sophistication, especially in predominantly school-based vocational education systems. Considering the speed of development in the world of work, instruction should be up-to-date or even advanced regarding the development level found in the sector in which graduates are expected to work.

Teachers should also support and enable self-directed learning. Searle asks*: "Are TVET Professionals Facilitators of Learning or Deliverers of Knowledge and Skills?"* (2009, 1259). They should be both when they have the ability to choose the appropriate way of teaching.

The development of education programmes, particularly in vocational education, increasingly lies in the hands of the vocational school. While requirements imposed by national occupational standards often have to be met, in many countries schools are also asked to adapt curricula to the needs of the local economy[3]. Vocational schools are also often engaged in offering further education and training in their field of expertise, extra to their initial vocational education and training programmes. This means vocational schools should have the capacity to act in a market-oriented manner. Therefore profound knowledge of the sector in question as well as capabilities for conducting needs analysis and market surveys, i.e. conducting the necessary research, are indispensable[4].

Learning environments in vocational education and training differ from those in general education, for they do not have to consider general pedagogical and didactical principles only, but must also provide opportunities to the students to gain experience, relevant to their future work. Considering the structural reality-gap between school and industry and the frequently limited resources of schools in terms of up-to-date facilities, cooperation with the private sector should be considered indispensable, even when such cooperation is not mandated by corresponding legal regulations. Internships for students in companies, when they are foreseen in the curricula, require the close cooperation of vocational education staff with companies to acquire internship places and organize the internship itself, for it to be a valuable learning experience for the students (cp. Billet 2009b).

A similar situation occurs in school development as in other areas of duty. A vocational school is successful, when a high share of its graduates is readily accepted in the labour market. Students' career guidance is therefore of utmost importance, as is cooperating with firms and companies to assure appropriate qualification of the graduates and facilitate job placements. To be a trusted partner of

3 In Germany the concept of broadly defined learning fields (Lernfelder) requires teachers to do their own detailing of the curricula.

4 Zhao and Lu (2009) state, that this is quite common practice in China.

companies requires professionalism in managing cooperation with the outside world and here it must be on the same level at which the industrial partners act, and embrace good understanding of their needs and business fields.

Areas of duty specific to vocational teachers include but are not limited to providing vocational skills training. The must also remain up-to-date with the requirements of the economy and work place, cultivate collaboration with companies, provide career guidance and counselling, conduct special kinds of labour market research, develop curricula for initial and further vocational education and training, and possibly assume their role in a TVET institution-based centre of excellence.

### *3.4.3 Reasons for specific standards for vocational teachers*

Teacher standards, applicable to all types of teachers are mainly developed with a view to general education teachers and therefore concentrate on classroom teaching, not least as general subject teachers usually out number teachers of vocational subjects. To summarize, vocational education, should take place largely outside the classroom, in workshops and in real-word production environments.

The content to be imparted is different in type to the content of general education, as it is not purely academic but strictly related to the world of work. Vocational learning must be practical learning in distinction to the more academic learning of general education. This requires different modes of learning. In addition, the modes of learning for different occupational areas are as different as they are for teachers of foreign languages and mathematics. TVET teachers need competences in the professional area they have to teach, just a foreign language teacher has to be fluent in the language he teaches. TVET teachers deal with young adult learners on their way to the labour market and not with students passing through to the next educational institution. All these arguments plainly assert that standards for TVET teachers have to be different to those of general teachers.

## 3.5 Questions and criteria regarding the analysis of existing standards

To develop teacher standards it is worthwhile not only to think about a theoretical foundation of standards, but also to take into account already existing standards (cp. Wilbers 2010, 33).

From the issues and aspects presented in this chapter criteria in the form of questions can be derived from which one can compare and analyse already existing teacher standards. The following main questions are considered in the next chapter:

Formal Structure

- What is the formal structure of the standards?
- What is the number of standard items?
- Which conceptual elements can be adopted, which have to be modified, which are not appropriate?

Target groups

- What is the target group? (e.g. all teachers, general education teachers, vocational teachers, teacher education institutions, etc.)

Purpose

- What is the purpose of the standard? (i.e. certification, quality assurance, quality development?)
- Do the goals and purposes of the analysed standards coincide with their own standards?
- Does the theoretical and practical foundation of the analysed standards coincide with the development objective?

# 4 Analysis of existing standards

In order to broaden their own view and to take part in the results collated by others thus avoiding mistakes made in the past, the decision was made to carry out a comparative analysis of already existing standards. The following five existing standards (short versions see Annexes 4 - 8) have been analysed in preparation of the development of standards for vocational teachers in Lao PDR. As virtually no standards for vocational teachers are available, standards for teachers in general are taken into consideration:

- England: Professional Standards for Teachers, issued in 2007 (TDA 2007)
- Germany: Standards für die Lehrerbildung: Bildungswissenschaften, issued in 2004 (KMK 2004)
- Lao PDR: Standards of Teachers, issued in 2010 (MoE 2010)
- USA: Model Core Teaching Standards (InTASC), issued as updated version in 2011 (CCSSO 2011)
- SR Vietnam: Professional Standard Regulation for Vocational Lecturers, Teachers, issued in 2010 (MoLISA 2010)

The CCSSO's Interstate Teacher Assessment and Support Consortium, responsible for the development and implementation of the InTASC-standards, perceives this approach as useful and understands its own standards "as a resource for states [. . .] and others as they develop policies and programmes to prepare, license, support, evaluate and reward today's teachers" (CCSSO 2011, 5). Following this recommendation the research team oriented not only on one source in its effort to develop standards.

Five reasons determined the selection of the standards to be analysed. 1. The number of standards should be manageable. 2. Regional standards should be represented (Laos, Vietnam). We note here we would have been happy to include standards from Thailand and Indonesia. These countries, however, found themselves unable to provide standards. 3. Standards from developed countries with more or less experience in dealing with standards have to be represented and not only from Europe (Germany, England) but the USA too. 4. The discussion on teaching standards did not last very long, but the team selected standards as up-to-date as possible. As can be seen above, most of the standards are quite up-to-date. The InTASC standards are supposed to be an exception, in as much as they are the updated version of standards, developed "in 1992, when there were no standards for teachers, and what was needed was a common vocabulary—a common understanding—of what good teaching should look like" (McWalters 2010). 5. The aim of this survey is to develop standards specifically for vocational teachers. Therefore it was important to find at least one standard model (Vietnam) designed for the specific characteristics of vocational teachers.

## 4.2 Formal structure / arrangement of the standards

In the first step the formal structure of the selected standards is analysed. All countries taken into account have given their standards a multi-stage structure, consisting of three stages.

| | 1. Stage | 2. Stage | 3. Stage |
|---|---|---|---|
| **England** | Interrelated sections | Attributes | Standards |
| **Germany** | Areas of competence | Competences | Standards |
| **Laos** | Groups of characteristics | Sub-characteristics | Indicators |

| | | | |
|---|---|---|---|
| **USA** | Categories | Standards | Indicators |
| **Vietnam** | Criteria | Standards | Indicators |

Figure 6: Formal Structure of the Standards I

A structure subdivided into more than two stages specifies the first stage (sections, areas of competence, characteristics, categories, criteria) in a meaningful way; it is easier to read and gives the user orientation in finding the appropriate formulation.

| | **1. Stage** | **2. Stage** | **3. Stage** | ∑ |
|---|---|---|---|---|
| **England** | Professional Attributes | 4 Attributes | 9 Standards | 33 |
| | Professional Knowledge and Understanding | 6 Attributes | 12 Standards | |
| | Professional Skills | 6 Attributes | 12 Standards | |
| **Germany** | Teaching | 3 Competences | 11/10 Standards* | 39/ 45* |
| | Educating | 3 Competences | 11/9 Standards* | |
| | Assessing | 2 Competences | 7/12 Standards* | |
| | Innovating | 3 Competences | 10/14 Standards* | |
| **Laos** | Attributes and Ethics | 9 Sub-characteristics | 43 Indicators | 136 |
| | Knowledge about Learners | 5 Sub-characteristics | 22 Indicators | |
| | Knowledge and Ability in Teaching | 15 Sub-characteristics | 71 Indicators | |
| **USA (InTASC)** | The Learner and Learning | 3 Standards** | 32 Indicators | 162 |
| | Content | 2 Standards** | 37 Indicators | |
| | Instructional Practice | 3 Standards** | 58 Indicators | |
| | Professional Responsibility | 2 Standards** | 35 Indicators | |
| **Vietnam** | Political Quality, Professional Ethics, Lifestyle and Behaviour | 3 Standards | 11 Indicators | 49 |
| | Professional Capacity | 2 Standards | 8 Indicators | |
| | Professional Pedagogy Capacity | 9 Standards | 24 Indicators | |
| | Professional Development Capacity, scientific Research Capacity | 2 Standards | 6 Indicators | |

* The first number refers to the academic phase, the second number to the practical phase of teacher education.

** Each Standard is described by indicators, which are assigned to three groups (kind of an additional stage): Performances, Essential Knowledge and Critical Dispositions.

Figure 7: Formal Structure of the Standards II

The absolute number of standards or indicators (these two terms are used in the 3rd stage) varies between 33 (England) and 162 (USA). The comparatively large number of InTASC-indicators is due mainly to the fact, that the InTASC-Standards use a version of the 4th stage to distinguish within the second stage between "knowledge, dispositions and performances as a way to probe the complexity of the teacher's practice" (CCSSO 2011, 6). Regarding Lao standards for general teachers, the 136 indicators came about due to the fact that the indicators were structured in very small steps rather than more complex formulations [e.g. indicator No. 5: "Educate learner on good attributes." (MoE 2010, 1)] and some indicators repeated certain competences leading to duplications [e.g. indicator No. 7: "*Able to learn/use important local language of point of station."* (MoE 2010, p. 1) and indicator No. 132: *"Learn ethic language of where one stations."* (MoE 2010, 8)].

The German standards have a special feature, due to the structure of German teacher education. It is structured in an academic phase, finalized by a master's degree, followed by a mandatory practical phase, which lasts in general about 18 months and takes place at schools under the supervision of mentors. Nevertheless the standards are designed the same way. Standards are applied in the academic phase [e.g. competency 2: *"Graduates know learning theories and different ways of learning."* (KMK 2004, 8)] and standards are applied in the practical phase (e.g. competency 2: "Graduates encourage different ways of learning and support their application." (KMK 2004, 8)].

In terms of the content related structure of the present standards they can be divided into three groups. In the first group the structure given to the standards is oriented very much to activities, the teacher has to execute. German standards provide an example of this approach, structured in teaching, educating, assessing and innovating. The second group is geared very much to qualifications or capacities, required by the teacher. English standards here distinguish between professional attributes, knowledge, understanding and skills. Vietnamese standards focus on political quality, professional capacity, professional pedagogic capacity and professional development capacity. A good example of the third group are the InTASC standards, focusing on areas of responsibilities, typical for teachers, such as learner and learning, content, instructional practice and professional responsibilities.

In all standards aspects of ethical behaviour are to be found, but only Vietnam and Laos refer expressly to these aspects, combined with political trustworthiness. Nevertheless German standards here refer to democratic values and standards.

## 4.3 Target groups of the standards

The term 'target group' in this context means on the one hand the kind of teacher, the standards apply for and on the other the level of experience and/or accomplishment, addressed by the standards.

Most standards worldwide are for general teachers that never take into consideration the characteristics of vocational education (cp. Wilbers 2010, 33). Thus, with the exception of Vietnam, all other standards are developed for teachers in general, without any specification. The InTASC standards apply to all teachers, cutting "across all subject areas and grade levels" (CCSSO 2011, 3). TDA standards have general applications too, covering "all forms of organized learning experienced across the curriculum. For example, areas of learning in the foundation stage, broad areas of curricular experience and learning through play in the early years, thematically structured work in the primary phase, single subjects, vocational subjects and cross-curricular work in the 14–19 phase" (TDA 2007, 5). The same applies to German KMK standards, which have to be fulfilled by all teachers, regardless of the type of school, school level or subject the teachers are specialized in and the teachers education level.[5] Regarding the

5 Currently, a more detailed specification of standards, for example for vocational teachers, is under discussion in Germany.

target group, the Lao standards – according to the MoES – are designed for primary and lower secondary school teachers. The only standards, applying explicitly "to vocational lecturers and teachers in vocational training colleges, vocational secondary schools, vocational training centres and other institutions engaged in vocational training", are the Vietnamese. Here they clearly do not apply "to teachers and lecturers who teach general subjects and the other subjects in vocational training colleges, vocational secondary schools" (MoLISA 2010, 1). Consequently they are regarded as a basis for improving the quality of vocational teachers and lecturers as well as teacher training institutions, for assessing the requirements, expected of vocational teaching staff, evaluating vocational teachers and lecturers and developing further legal regulations (cp. MoLISA 2010, 2 and 7). The Vietnamese standards in particular emphasize the expertise, professional skills and professional pedagogic capacity expected of vocational teachers and their responsibility to contribute to the development of the institution in which they work. Although the expectations are partly limited to formal requirements, such as "graduates from university . . ." (MoLISA 2010, 3), they provide hints about what distinguishes a vocational teacher from a teacher of general subjects, for instance by the proficiency of professional skills and the understanding of the importance of occupational health and safety.

England provides standards defining "the characteristics of teachers at each career stage. It provides professional standards specifically for

- the awarding of Qualified Teacher Status (QTS) (Q)
- teachers on the main scale (Core) (C)
- teachers on the upper pay scale (Post Threshold Teachers) (P)
- Excellent Teachers (E)
- Advanced Skills Teachers (ASTs) (A)" (TDA 2007, 2).

These standards draw a picture of what a teachers' career could look like. It means that "teachers who are assessed as meeting" the standard for P, E or AST *"also access the relevant pay scale"* (TDA 20 07, 2). Even though German KMK standards differentiate between the academic and practical phase of teacher education, they do not define different career stages and cannot be applied for so-called pay-standards.

All other countries analysed designed standards, which do not distinguish between different levels of experience and professionalism. For instance TASC standards declare, "These standards are no longer intended only for 'beginning' teachers but as professional practice standards, setting one standard for performance that will look different at different developmental stages of the teacher's career. What distinguishes the beginning from the accomplished teacher" – and the German standards argue in quite the same way it – "is the degree of sophistication in the application of the knowledge and skills" (CCSSO 2011, 6). However, what is missing is some kind of instruction informing one how the standards have to be handled to assess different levels appropriately, and what the standards look like at different developmental stages. In Vietnam, the standards (Article 3 No. 4) distinguish between "teachers of elementary level (hereinafter referred to as the vocational primary teacher), teachers of intermediate level (hereinafter referred to as vocational secondary teachers), and teachers of advanced level (hereinafter referred to as vocational college teacher)" (MoLISA 2010, 2). However these standards are just limited to this formal classification and make no further proposals for the deployment or implementation of the different levels.

## 4.4 Main purpose of the standards

Chapter 3 described what possible aims are pursued with the implementation of educational standards. Although Laos does not explicitly declare the purpose of its already existing standards, it can be

assumed that their implementation mainly serves the improvement of education in general. This assumption will be supported by the fact that these standards have been developed within the context of the Second Education Quality Improvement Project–Teacher Training Enhancement and Status of Teachers Project (TTEST), funded by Sida (cp. MoE 2008a, 14).

As Laos as well as Vietnam are considered to be developing countries, Vietnam postulates quite the same motivation for issuing its standards asserting they have to act as a *"basis for building the training objectives, training and fostering programmes to improve the quality of vocational lectures, teachers"* (MoLISA 2010, 2).

Even German KMK standards serve as a crucial element in maintaining and improving educational quality. But the German ministries of education also perceive them as a basis for the development of teacher education curricula and the regular evaluation of teacher education (cp. KMK 2004, 1).

As described in detail above, England uses its standards primarily as a "framework for a teacher's career" (TDA 2007, 2) and a tool to plan his/her future development towards the next higher qualification level, connected with a commensurately higher salary.

With the implementation of its updated standards InTASC pursues a new vision: "The updating of the core teaching standards was driven not only by new understandings of learners and learning but also by the new imperative that every student can and must achieve to high standards. (. . .) These standards embrace this new emphasis and describe what effective teaching that leads to improved student achievement looks like" (CCSSO 2011, 3). A further purpose of these standards *"is to serve as a resource for states, districts, professional organizations, teacher education programmes, teachers, and others as they develop policies and programmes to prepare, license, support, evaluate, and reward today's teachers"* (CCSSO 2011, 5). The last statement illustrates that in contrast to other standards InTASC standards are considered as a recommendation without being a legal obligation. It appears States follow the encouragement of CCSSO "*to review their professional teaching standards and either adapt or adopt the InTASC model core standards as part of that review process"* (CCSSO 2011, 5). Until 2011, when the revised version was released, *"thirty-eight states (. . .) [had] teaching standards that were based on the 1992 InTASC standards"* (CCSSO 2011, 5).

In summary one can state, that the hoped-for improvement of educational quality in general seems to be the most outstanding motive for developing standards. At least this applies to Laos, Vietnam and Germany. England and the USA pursue more sophisticated aims, perhaps depending at least in part on the fact that these countries are considered developed and partly that both countries have extremely long-term experience in developing, applying and updating standards. However, the improvement of education is definitely a goal to strive for even where they are concerned.

## 4.5 Outcome of the analysis

There are various approaches for developing teacher standards. One could start from scratch with a clean sheet of paper, basing everything on extensive theoretical research. A more practical oriented approach carries out extensive empirical research prior to any actual development of the standards. In preparation of the development procedure the research team analysed currently existing standards and compared them by means of certain criteria to find out whether they can be adapted to specific needs. This approach not only saves time and effort, but also helps to avoid errors and one participates in experiences and remains up-to-date. In adopting this route the study follows, on the one hand the recommendation of the CCSSO to 'either adapt or adopt' and on the other, the good example of the Southeast Asian Ministers of Education Organization Regional Centre for Educational Innovation and Technology (SEAMEO INNOTECH). All of which carried out an eleven country audit to develop a

common core teacher competency standard framework for Southeast Asia (SIREP framework, see chapter 5).

As described in the chapters 4.1 to 4.3, the analysis of the existing standards has been carried out based on four criteria: What does the formal structure of the standards look like? What content-related aspects have mainly determined the structure of the standards? Which target group is addressed by the standards? What is the main purpose of the standards? The results of this analysis will significantly determine the design of Laotian standards to be developed for vocational teachers, naturally with thorough consideration of the specific conditions and requirements, Lao PDR is asking for.

The results of the analysis proved it pertinent to structure Laotian vocational standards into three-stage, identifying and highlighting important aspects of the teacher's profession and focusing on vocational teachers at bachelor level. The Laotian stakeholder was most convinced by the clear formal and content-related structure of German standards and was prepared to take it on, supplemented by an additional competency area, dubbed 'Competency Area of Acting in an exemplary Manner'.[6] Following the German structure Laos named the first stage 'area of competency' and the second stage 'competency'. However, rather than the term 'standard' for the third stage, it is chose 'indicator', as the word indicator describes the stage or level of something. Here it refers to the level of competency a vocational teacher has to achieve. Furthermore "indicator"emphasises that standards must be formulated – when possible – in a measurable way. The German approach, to distinguish between an academic and a practical phase, has not been taken on. This specific approach was deemed ineligible for Laos simply because the Laotian teacher education system doesn't provide this kind of structure.

The newly developed standards provide 80 indicators in total, describing the requirements imposed on the acting of Laotian vocational teachers. This number of indicators mirrors the attempt to find a balance between comprehensibility and complexity, between completeness and clarity, between remaining realistic and focusing on the future, between being factual as much as possible and being abstract as long as it is necessary.

The target group was clearly defined by the Ministry of Education and Sports for the research team. Standards for vocational teachers have to be developed. However, these standards must not only apply to vocational teachers, but all teachers, who work in public and private institutions of technical and vocational education i.e. vocational schools, colleges, skills development centres etc. In contrast to Vietnam these standards are not limited to a specific group of teachers but focused to specific educational institutions. This ensures that at one institution all teachers are working in compliance with the same standard.

According to the results of the tracer study, mentioned in chapter 2, the education of vocational teachers in Lao PDR needs urgently "improvement in terms of working conditions, wage structure and career opportunities" (Soysouvanh 2011, 26). The design of 'pay standards', as they are called in England, was at first considered an option to decrease these obstacles; but appears not to be feasible politically at the moment. However, the Lao Government has already issued a decree (cp. MoE 2012), stipulating amongst other things, a modified salary structure for teachers and additional incentives which draws a more appealing picture of how a teacher's career could take shape. As stated already in previous chapters, the improvement of educational quality in general seems is the most crucial motive for implementing standards. The standards, to be developed for Laotian vocational teachers are no exception here. The distinct purpose of these standards is the improvement of vocational education in

6 This decision has been made during the Capacity–Building– / Continuing Research–Workshop, which took place on 24th/25th May 2012 in Thalat.

general. To pursue this purpose they also have to serve as a basis for the redevelopment of teacher education and the revision of the respective curricula.

To ensure that the standards, not only meet regional and international requirements but also consider the challenges of the 21st century, the research team has decided, to correlate the draft of the standards in a final step with two supranational standard frameworks.

# 5 Correlation with supranational standard frameworks

Developing standards for vocational teachers in Lao PDR the research team considered

- the theoretical foundation of standards for teachers, discussed in chapter 3,
- the specific national preconditions of Lao PDR, described in chapter 2,
- existing standards, analysed in chapter 4, and
- the experience and expertise of stakeholders as well as members of the RCP-platform.

In this last step the decision was made to correlate the standards evolved so far using two supranational standard frameworks as benchmarks; the UNESCO ICT–Competency Framework for Teachers and the SEAMEO INNOTECH Teaching Competency Standards in Southeast Asian Countries. What were the reasons behind this correlation? Firstly the very existence of these supranational frameworks to some extent forced the team to consider them when drafting the standards. Secondly the institutions, entrusted with the design of these supranational frameworks, understand them as benchmarks for standard development. SIREP stated that the intention of the SEAMEO INNOTECH Teaching Competency Standards is, "to assist the (. . .) member states in benchmarking and developing their own teaching competency standards" (SIREP 2010, 7). UNESCO underlines the intention of the ICT Competency Framework for Teachers in a similar way. This framework is not only "intended, to inform educational policy makers, teacher-educators (. . .) on the role of ICT in educational reform" (UNESCO 2011, 3), but also "specifies the competencies which teachers need in all aspects of their work" (UNESCO 2011, 8). Thirdly, when supporting the development process within the countries in general, the two frameworks could be considered "as an important statement (. . .) on how teacher-education, particularly in developing countries, can increase the effectiveness of teachers" (UNESCO 2011, 5) Therefore this correlation must serve to further improve the quality of the drafted standards. Amongst other things the correlation process was determined in particular by the following questions:

- Did the development process follow the right objectives?
- Have regional specifications been taken into account sufficiently?
- Are the standards developed appropriate for the 21st century. Can it be assumed that they have long-term significance?
- Are there further aspects that have not been taken into account in the development process?

## 5.2 UNESCO ICT Competency Framework for Teacher

It has been agreed worldwide that the appropriate use of information and communication technologies (ICT) can be beneficial to the education of people. The possible benefits range from "improved teaching and learning processes to better student outcomes, from increased student engagement to seamless communication with parents, and from school networking and twinning to more efficient management and monitoring within the school" (UNESCO 2011, 4). In the awareness of how important ICT for education can be, UNESCO, in cooperation with partners from the industry and further experts, developed the UNESCO ICT–Competency framework for Teachers (ICT-CFT), applicable "to all levels of education: primary, secondary, vocational and tertiary education as well as on-the-job-learning and continuing education" (UNESCO 2011, 8). This framework was first published in 2008 and updated in 2011.

Based on the understanding, that more sustainable economic growth requires increased human capacities, economists identified the following three productivity factors (cp. UNESCO 2011, 7):

- The ability of the workforce to use equipment that is more productive.
- The ability of the workforce to increase the value of economic output and not merely the amount.
- The ability of the workforce to generate new knowledge on its own.

To connect the development of education with economic development, the present ICT-framework outlines three approaches to teaching based on the above-mentioned productivity factors, representing different stages in the use of information and communication technology within education.

- The **Technology Literacy approach** is designed to increase "the extent to which new technology is used by students, citizens and the workforce by incorporating technology skills into the school curriculum".
- The **Knowledge Deepening approach** is designed to increase "the ability of students, citizens, and the workforce to use knowledge to add value to society and the economy by applying it to solve complex, real-world problems".
- The **Knowledge Creation approach** is designed to increase "the ability of students, citizens, and the workforce to innovate, produce new knowledge, and benefit from this new knowledge" (UNESCO 2011, p. 7).

The ICT–framework consists of 18 modules. These modules have been developed by crossing these three different approaches to teaching with six aspects of a teacher's work, related to the use of ICT.

| Six aspects of a teacher's work | Technology Literacy | Knowledge Deepening | Knowledge Creation |
|---|---|---|---|
| Understanding ICT in Education | 1 | 1 | 1 |
| Curriculum and Assessment | 2 | 2 | 2 |
| Pedagogy | 3 | 3 | 3 |
| ICT | 4 | 4 | 4 |
| Organization and Administration | 5 | 5 | 5 |
| Teacher Professional Learning | 6 | 6 | 6 |

Source: UNESCO 2011, 9.

Figure 8: ICT–Framework

Each country has to decide which approach is suitable for adopting, depending "on the extent to which ICT is currently integrated into its society, economy and education system" (UNESCO 2011, 9). Although Lao PDR made a strong commitment to become a knowledge-based society (cp. Government of Lao PDR 2011), at the moment the country's economy is based primarily on natural resources (cp. UNDP 2010, 5) and subsistence agriculture. Therefore it seems to be appropriate for Laos to adopt the first step approach of 'Technology Literacy', to *"enable learners, citizens and the workforce to use ICT to support social development and improve economic development"* (UNESCO 2011, 9). Occasionally the objection is raised that Lao PDR schools and teachers are not properly prepared for the use of ICT. This is in fact the case - in the present situation. In general the schools lack sufficient equipment and most teachers lack the required knowledge. However, one must also note that the MoES is well aware of this situation, but sets a very ambitious goal in terms of "upgrading teachers for technical and pedagogical subjects and upgrading TVET managers and administrative personnel continuously to enable them to follow the ICT development" (MoES 2007, 11). Thus it appears vital and no

exaggeration to include application of ICT into the standards to provide an appropriate tool for the 21st century.

Assuming that 'Technology Literacy' is the most appropriate approach for Lao PDR, the following table shows the ICT-related competencies, teachers are expected to demonstrate, related to the six aspects of a teacher's work (cp. UNESCO 2011, 20–24) and the accordant indicators, located within the standards, developed so far. On the left side of the table, are the six aspects of a teacher's work, each illustrated by the corresponding curriculum goals and competencies, teachers are expected to attain. On the right side of the table all aspects are listed, where the required competencies of the teachers are to be found within the indicators of the developed "Standards for Vocational Teachers in Lao PDR". In this way it can be ensured that the competencies required by the ICT framework are actually mapped in the developed standards.

| **UNESCO ICT–Competency Framework for Teachers** | | | **Standards for Vocational Teachers in Lao PDR** |
|---|---|---|---|
| **Six Aspects of a Teacher's Work** | **Curriculum Goals** | **Teacher Competencies** | **Indicators** |
| Understanding ICT in Education (Module 1) | **Policy Awareness** With this approach, programmes make direct connections between policy and classroom practices. | Teachers must be aware of policies and be able to articulate in consciously skilled ways how their classroom practices correspond to and supports policy. | Indicator 1.2 |
| Curriculum and Assessment (Module 2) | **Basic Knowledge** Changes in the curriculum entailed by this approach often include improving basic literacy skills through technology and adding the development of ICT skills in different contexts, which will involve incorporating in other subjects a range of relevant ICT resources and productivity tools. | Teachers must have an excellent knowledge of the curriculum standards for their subject, as well as knowledge of standard assessment strategies. In addition, teachers must be able to integrate the use of technology into the curriculum. | Indicator 8.10 |
| Pedagogy (Module 3) | **Integrate Technology** Changes in pedagogic practice involve the integration of various technologies, tools, and digital content as part of whole class, group, and individual student activities to support didactic instruction. | Teachers must know where, with whom, when (as well as when not) and how to use ICT for classroom activities and presentations. | Indicators 9.1 and 9.2 |

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| ICT (Module 4) | **Basic Tools** The technologies involved in this approach include the use of computers along with productivity software; drill and practice software, tutorials, and web content; and the use of networks for management purposes | Teachers must know basic hardware and software operations, as well as productivity applications software, a web browser, communications software, presentation software, and management applications. | Indicators 8.4 and 14.1 |
| Organization and Administration (Module 5) | **Standard Classroom** Little change in social structure of the class occurs in this approach other than, perhaps, the spatial placement and integration into the lesson of technology resources in the classroom or in labs. | Teachers must be able to use technology with the whole class, small groups, and individual activities and ensure equitable access is provided to all students. | Indicator 16.7 |
| Teacher Professional Learning (Module 6) | **Digital Literacy** The implications of this approach for teacher education focus on the development of digital literacy and the use of ICT for professional improvement. | Teachers must have the technological skill and knowledge of web resources necessary to use technology to acquire additional subject matter and pedagogical knowledge in support of their own professional learning. | Indicator 15.5 |

Source: cp. UNESCO 2011, 20–24

Figure 9: Six Aspects of a Teacher's Work

## 5.3 SEAMEO INNOTECH Teaching Competency Standards in Southeast Asian countries

Teacher competency standards have been developed, implemented and monitored in a number of Southeast Asian countries, generally based on the conditions of the specific country. The Southeast Asian Ministers of Education Organization Regional Centre for Educational Innovation and Technology (SEAMEO INNOTECH) carried out a study, comparing standards in terms of an 'Eleven Country Audit' from Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste and Vietnam. The main objectives of this audit were to describe the current state of standard development across the Southeast Asian region, to explore commonalities in these standards and to facilitate capacity building, teacher exchange and lifelong learning on a regional level. "The outcome of the study resulted in the development of a set of common core teacher competency standards for SEAMEO countries. These were translated into a competency framework composed of a list of general and enabling competencies that Southeast Asian teachers would need to master to be effective in the 21st century." (SIREP 2010, p. 3) The above mentioned set of common core teacher competency standards, titled 'General Area of Responsibility/Competency (A – K), subdivided and operationalized into 'Specific Tasks/Competencies' have been outlined in a table (see Annex 9). To check the completeness and quality of the standards, developed so far, the "Teaching Competency Standards in Southeast Asian Countries" has been used as a benchmark. Test results

showed that competences where necessary had been supplemented and indicators had been formulated more precisely or more comprehensively. The numbers in red (see Annex 9) under each Specific Task/Competency refer to the relevant indicator of the newly developed standards.

The following examples illustrate the approach and some of the considerations that have been made during the alignment process.

**4 Pillars of education:** Within the General Area of Responsibility / Competency the sixth Specific Task/Competency (A.6) stipulates that teachers have to *"assess students' knowledge, skills, values and attitudes on the 4 pillars of education".* UNESCO developed the concept (cp. UNESCO 1996), that education throughout life is based on 4 pillars: learning to know (including learning to learn), learning to do, learning to live together and learning to be. Almost the entire competence area A refers to this concept (e.g. learning to know in A.2), so the decision was made to highlight this concept using the indicator 10.5 within the competence No. 10 'Supporting the learning process'.

**Information and Communication Technology (ICT):** As outlined above UNESCO recommends the provision of ICT competence to promote the sustainable development of countries. The SEAMEO INNOTECH framework also mentions the integrated use of ICT in teaching and learning, if only in Specific Task E.4. The provision of such a future-focused competence has to be considered more in detail, and the decision was made to emphasise ICT not only in the Competence area of Teaching (Indicators 8.4, 8.10, 9.1, 9.2) but also in the area of Innovating (Indicators 14.1, 15.6, 16.7).

**Higher Order Thinking Skills (HOTS):** The concept of HOTS, referred to quite often in education-related sources, is based on the taxonomy of educational objectives, published by Benjamin Bloom in 1956 (cp. Bloom et al. 1956). Bloom identifies six different levels of thinking: knowledge, comprehension, application, analysis, synthesis and evaluation. Higher order thinking skills are those skills in the top three levels: analysis, synthesis and evaluation. These three skill levels are summarized in critical thinking. Quite similar to the 4 pillars of education, the entire General Area of Responsibility of the SEAMEO INNOTECH framework refers to HOTS. Even so that HOTS are obviously very important for the education of self-determined learners, it seemed to be sufficient to emphasize these skills under the more self-explanatory label 'critical thinking (analysis, synthesis, evaluation)' within the competence areas of Motivating learners (Indicator 11.2) and measuring performance (Indicator 13.2).

## 5.4 Conclusion

The correlation of the drafted standards with two supranational frameworks was absolutely crucial and has proven to be very useful. Most significantly, aspects that had not been taken into consideration could have been made visible. At the same time, the team was able to confirm it is on the right track. In the following chapter the result of this very thorough development process will be demonstrated in detail.

# 6 Standards for vocational teachers in Lao PDR

This document provides standards for vocational teachers (hereinafter referred to as 'teachers') in Lao PDR with the aim to promote and maintain high quality teaching practice. The standards describe the expected competencies, including knowledge, skills, attitudes and behaviour, required for teachers to carry out their professional duties effectively.

The following standards have been developed on behalf of the Ministry of Education and Sports (MoES) taking into account:

- the present situation of the vocational education system of Lao PDR,
- the legal framework and education policy of Lao PDR,
- existing national and international standards,
- specifications of vocational education.

To ensure the quality of the standards they have been aligned with two important standard frameworks[7].

**Scope of Standards**

These Standards apply to all teachers, who work in public and private institutions of technical and vocational education, such as vocational schools, colleges, skills development centres etc.

The Standards are structured into the following five competency areas:

**A.** Competency Area of Acting in an exemplary manner

**B.** Competency Area of Educating

**C.** Competency Area of Teaching

**D.** Competency Area of Assessment

**E.** Competency Area of Self-Development and Innovation

Each competency area will be subdivided into specific competencies (**1. – 16.**), illustrated by indicators.

| **A. Competency Area of Acting in an exemplary manner**<br>Teachers are aware of the specific requirements of their profession in terms of attitudes, ethical behaviour and the assertion of their rights and duties. | |
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| 1. **Internalizing positive attitudes**<br>Teachers show a positive attitude towards the nation and the politics of the government and act as a role model for learners and society. | 1.1 Support the policy of the government.<br>1.2 Support the decisions of the government that focus on the social and economic development of the country and implement these decisions within the context of their classroom practices, and generally during professional activities.<br>1.3 Be members of at least one of the mass organizations and take active part in the activities of the organization.<br>1.4 Act as a role model for society in general and for the learners entrusted to them particularly by dressing decently, |

7 Information and Communication Technology – Competency Framework for Teachers (ICT–CFT), first published in 2008 and updated in 2011 by UNESCO; Teaching Competency Standards in Southeast Asian Countries, published in 2010 by SIREP (SEAMEO INNOTECH Regional Education Programme).

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| | behaving properly and honestly, and in compliance with the constitution and national law. |
| 2. **Recognizing National Ethics**<br>Teachers consider national ethics during work and in their private lives and put them into practice. | 2.1 Respect the fundamental rights of every human being and treat all learners fairly and equally.<br>2.2 Know, reflect critically and communicate social values and standards based on tradition, religion and culture.<br>2.3 Respect their position of authority and never use such authority to take advantage of others, or be influenced by others unduly. |
| 3. **Respecting Rights and Duties**<br>Teachers understand their profession as a public duty, encompassing specific responsibilities and obligations. | 3.1 Be familiar with the basic principles and structures of the national educational system.<br>3.2 Align their professional activities with the three characteristics and five principles of education[8], and the needs of the learners.<br>3.3 Know the legal framework of their profession including their own rights and duties and act accordingly.<br>3.4 Understand their profession as a teacher as a service to their country and its society.<br>3.5 Work according to scientific standards where appropriate and necessary. |

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| **B. Competency Area of Educating**<br>Teachers educate learners entrusted to them with great responsibility, and involve other people who are also responsible for the learners' performance (i.e. parents, family members, caregivers). | |
| 4. **Considering the diverse backgrounds of learners**<br>Teachers know the social, ethnical and cultural living conditions of learners and promote their individual development. | 4.1 Know selected pedagogic, sociological and psychological theories of development and socialization of young people.<br>4.2 Be familiar with the impact that culture, ethnicity and gender can have on the educational process.<br>4.3 Consider the cultural, ethnic and social diversity of the respective study group.<br>4.4 Identify disadvantages and provide suitable pedagogical support. |
| 5. **Considering the working environment**<br>Teachers are closely associated with the working world and the labour market and support learners to orient themselves within this new environment. | 5.1 Have knowledge of the practice of working and the working environment in relation to the relevant curricula areas. Connect this knowledge with their own experiences of working and transfer this knowledge to the learners.<br>5.2 Show learners how to apply theoretical knowledge within the practical context of the workplace.<br>5.3 Train together with learners to demonstrate how to plan, organize and cope with routine and non-routine tasks associated with the workplace.<br>5.4 Demonstrate to learners how to select and handle tools, materials, machinery and equipment in an appropriate, responsible and safe way.<br>5.5 Be familiar with legal and practical working conditions and the required occupational health and safety precautions |

8 MoES (2012): National Standards of Curricula (Draft), Vientiane, 7.

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| | including first aid facilities. Train learners how to recognize these conditions within the work environment. |
| 6. **Supporting self-determination**<br>Teachers support learners to develop self-confident and self-determined characteristics. | 6.1 Know how to support students to develop self-confident and self-determined characteristics.<br>6.2 Encourage learners to make their own decisions, and practice with learners to develop skills in self-determination.<br>6.3 Train together with learners to demonstrate how to deal with personal crises. |
| 7. **Communicating and interacting**<br>Teachers manage classroom activities and prevent, identify and solve difficulties and conflicts, which occur during the education process in classrooms, workshops or generally at school. | 7.1 Have knowledge of interpersonal communication methods and apply interaction techniques within the learning environment.<br>7.2 Discuss and explain rules with learners to promote respect for one another, and ensure the implementation of rules.<br>7.3 Organize social relationships between learners, colleagues, parents, families, caregivers, companies/employers and the work environment.<br>7.4 Are able to tackle discipline problems particularly during lessons (unrest, noise, inattention etc.) and to retain control.<br>7.5 Identify and analyse conflicts and their causes and demonstrate the ability either to prevent or to solve them in an appropriate way.<br>7.6 Develop and implement - in cooperation with colleagues - common approaches in dealing with problems and conflicts. |

| **C. Competency Area of Teaching**<br>Teachers have a good command of the teaching and learning process. | |
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| 8. **Planning lessons**<br>Teachers prepare lessons in a professional and appropriate way, considering a wide range of different temporal and organizational arrangements (usual classroom lessons, object-lessons, on-the-job training, workplace based lessons, training courses etc.). | 8.1 Know the educational goals of the national legal educational framework and the subject specific curricula.<br>8.2 Know the content of the curricula areas to be taught and demonstrate subject specific literacy.<br>8.3 Know selected teaching methods, general didactic concepts and subject specific didactic concepts, and have skills in choosing appropriate methods and concepts to promote the learners' participation.<br>8.4 Demonstrate a good command of the vocational skills required for the curricula area being taught, and a basic understanding of hardware and software operations, required for the appropriate application of Information and Communication Technology (ICT).<br>8.5 Identify learners' baseline level of knowledge and skills, they have acquired in a formal or non-formal way, and use this information to design and formulate learning objectives, lesson plans, lesson content, and ordering of lesson content (learning sequences).<br>8.6 Organize the lesson content, learning sequences and teaching of specific concepts in a manner that promotes the use of a variety of learning methods (writing, reading, listening, speaking, doing etc.) to encourage active learning and critical thinking. |

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| | 8.7 Demonstrate skills to prepare classroom and workshop environments, and to organize these environments to enable work process oriented training sequences.<br>8.8 Design lesson plans, learning sequences and lesson content in a way that supports learners in gaining work process oriented competencies.<br>8.9 Design lesson plans, learning sequences and lesson content by selecting and combining different content, didactic concepts, teaching methods, teaching media, and communication methods appropriate for learners' diversity and their stage of development.<br>8.10 Incorporate appropriate Information and Communication Technology (ICT) activities into lessons and learning sequences in a way that supports learners' acquisition of subject specific literacy, and encourages and enables learners to use ICT. |
| 9. **Giving lessons**<br>Teachers give lessons in a factual and professionally correct manner considering a wide range of different temporal and organizational arrangements. | 9.1 Have a good command of teaching media, use and application of technical equipment and relevant Information and Communication Technology (ICT).<br>9.2 Use the advantages of new media and the Information and Communication Technology (ICT) where appropriate to support and improve the learning process.<br>9.3 Give lessons and conduct learning sequences as planned; listen and respond to learners' questions and needs, and adjust their understanding of teaching concepts where necessary. |
| 10. **Supporting the learning process**<br>Teachers support the learning process of learners. | 10.1 Create a safe, clean and caring learning environment, which promotes an active, co-operative and self-determined way of learning, facilitating a high standard of learning performance.<br>10.2 Organize and structure the lesson content in ways that promote the learning process of learners.<br>10.3 Know how different types of learners acquire knowledge and skills.<br>10.4 Address different types of learners in a supportive way when planning and giving lessons.<br>10.5 Facilitate learners in learning to know, learning to do, learning to live together and learning to be (The four Pillars of Education[9]).<br>10.6 Develop and utilize appropriate teaching and learning resources which promote in particular self-determined learning. |
| 11. **Motivating learners**<br>Teachers motivate learners and empower them to critically question new knowledge, draw | 11.1 Know, convey and practice selected strategies of learning and self-motivation.<br>11.2 Know, convey and practice methods of self-determined, self-dependent, critical-thinking (analysis, synthesis, evaluation), and co-operative learning and working. |

9 Cp. UNESCO (1996): Learning: The Treasure within. Online: http://collections.infocollections.org/ukedu/en/d/Jh1767e/3.1.html (retrieved 08.09.2012)

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| connections and apply knowledge. | 11.3 Inspire learners to become lifelong learners. |

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| **D. Competency Area of Assessment**<br>Teachers assess learners in a fair and responsible manner; they promote learners and give advice to young people, parents, family members, caregivers etc. | |
| 12. **Considering individual preconditions**<br>Teachers diagnose the preconditions of learners and know how they learn. Teachers use this information to support learners and provide appropriate advice. | 12.1 Know how different preconditions of individual learners affect the learning process and the interaction within the classroom and/or the workshop environment.<br>12.2 Identify the learners' baseline level of knowledge, their stage of development, their learning needs, their potential to learn and any learning obstacles. Use this information to plan teaching so the learner development can be promoted appropriately.<br>12.3 Recognize learning disabilities or other barriers, as well as special talents, and assist these learners appropriately.<br>12.4 Cooperate with colleagues and the school administration in guiding and counselling learners, parents, family members, caregivers etc. |
| 13. **Measuring learner performance**<br>Teachers measure the performance of learners based on transparent criteria and communicate the results in an appropriate way. | 13.1 Have knowledge of the different types of assessment methods and tools.<br>13.2 Design assessment tools that correspond to learning goals (theoretical and practical), the learners' level of ability and understanding, and the taxonomy of learning objectives (e.g. Bloom [10] ), particularly emphasizing critical thinking (analysis, synthesis, evaluation).<br>13.3 Assign meaningful homework for learners to deepen, apply, consolidate and practice newly acquired knowledge. Evaluate homework adequately to measure the learners' progress.<br>13.4 Communicate assessment results to learners within a reasonable period of time in a beneficial way that provides fair and encouraging feedback.<br>13.5 Analyse and interpret assessment results to plan for future teaching and learning processes.<br>13.6 Use assessment results and teachers' reflections for identifying necessary interventions and modifying teaching practice. |

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| **E. Competency Area of Self-Development and Innovation**<br>Teachers develop their knowledge and skills continually and make a valuable contribution to the development of their country. | |
| 14. **Accepting professional requirements**<br>Teachers are aware of the specific requirements of their profession and | 14.2 Use working hours and equipment, including the available Information and Communication Technology (ICT), in an effective, responsible and efficient manner to enhance productivity. |

10 Cp. Bloom, Benjamin et al. (1956): Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain. New York.

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| promote collaborative working amongst the staff team. | 14.2 Have knowledge and strategies to deal with workload, stress and other work challenges.<br>14.3 Communicate, interact and co-operate with colleagues.<br>14.4 Work, if possible, in a team and support each other to prepare lesson content, ordering of lesson content (learning sequences) and to share workload within the teaching team. |
| 15. **Continuing professional development**<br>Teachers understand their profession as a lifelong learning process | 15.1 Perform administrative work and complete documentation, recording evidence of their own work and its results.<br>15.2 Apply selected methods for evaluating the teaching-learning process and identify areas of improvement to develop their own professional knowledge and practice.<br>15.3 Participate in self-evaluation and provide constructive feedback to colleagues. Integrate feedback into work practices to improve learning and teaching.<br>15.4 Know where to get assistance and use these opportunities to develop knowledge and skills. Provide assistance by coaching and mentoring colleagues, particularly student teachers and novices.<br>15.5 Acquire the comprehensive ability of learning to know, learning to do, learning to live together and learning to be (The four Pillars of Education[11]).<br>15.6 Use individual and group, formal and non-formal training opportunities on a regular basis to keep up-to-date with new professional developments and work practices in vocational education, as well as digital literacy and skills in the application of Information and Communication Technology (ICT).<br>15.7 Cooperate with colleagues to explore and contemplate contemporary educational issues and research to incorporate new knowledge into work practices. |
| 16. **Participating in innovation**<br>Teachers participate in the planning and implementation of school projects and development proposals. | 16.1 Have knowledge of the guiding principles of the education law, the national educational policy and the technical and vocational education development strategy.<br>16.2 Have knowledge of the vision and mission of their school, and support their school in implementing activities that contribute to the development of the community, the district, the province and the country.<br>16.3 Support the educational policy of their country and the mission of their school and its various study courses in an active and innovative way.<br>16.4 Collect information about relevant stakeholders and their needs in relation to the school environment (community members, industry, companies/employers, general public etc.) and apply this information when planning and developing school services.<br>16.5 Support the school administration in developing the school in order to achieve its mission successfully. |

11 Cp. UNESCO (1996): Learning: The Treasure within. URL: http://collections.infocollections.org/ukedu/en/d/Jh1767e/3.1.html (retrieved 08.09.2012)

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| | 16.6 Support the school administration in planning and realizing social and extracurricular activities and projects.<br>16.7 Support the school administration in integrating Information and Communication Technology (ICT) into school activities and in providing equitable access to all colleagues and learners. |

# 7 Implementation of Standards for TVET Teacher Education

As described before, there is a lack of well-qualified vocational teachers and the standards are established for the purpose of improving the quality of teachers and teaching at vocational schools in Lao. The development of the standards will only be useful if the standards are actually applied. Therefore it is absolutely essential to continue the work of developing standards and to ensure the implementation with emphasis.

For implementation we propose three key elements:

- the appropriate dissemination of the standards
- the development of standard-based curricula and the accomplishment of these curricula at the university
- the establishment of a concept of mentoring at the vocational schools

The appropriate dissemination of the standards is the first crucial point. If the standards are permitted by the MoES it is important, not only to announce the standards, but to inform a good number of the key actors in vocational education throughout the whole country. For the acceptance of the standards two groups – aside from the stakeholders already involved - are crucial: these are the headmasters of vocational schools, and the administrative staff in provincial educational departments in Lao PDR.

Similarly, as with the participation of relevant stakeholders in the development process of the standards, it would be most appropriate to inform these actors in a personal way, face-to-face. The goals of the standards should be put forward in information sessions and the process of development and how exactly to reach these standards can be discussed, The results of these sessions and talks always result in more advice and hints on how to strengthen standards implementation.

The second and more institutional way to implement the standards addresses the system of higher education for vocational teachers. The developed standards for the vocational teacher at bachelor level should have a direct impact on the education of these teachers. It is necessary to develop a new standard-based curriculum, based on the standards described in chapter 6. The MoES, in charge of the approval of new curricula in higher education, should agree to such a curriculum, only when it is clear just how the standards are being taken into account. The curriculum must to be considered as a national curriculum, mandatory for all institutions, educating vocational teachers at bachelor level.

To apply the standard-based curriculum the academic institutions must be supported. We propose coaching for lecturers in vocational education at the National University of Laos as a proper means to strengthen their work process knowledge and improve the quality of their lessons. The development of the curriculum described above is necessary for the improvement of the educative quality of vocational teachers. But this is still not enough. For this we propose establishing a mentoring concept, accomplishing the standards at the vocational schools. This mentoring concept is to be focused on different target groups working in the same institution i.e. vocational schools throughout Lao PDR. The first group consists of “fresh” graduates, who need qualified support in the process of transition from university to professional life at their vocational school. The second group consists of “old” teachers, who need to be upgraded, in line with the standards.

Experienced teachers act as mentors but they must always remain open to new developments. Suitable candidates should be nominated by their own schools. The will need to be prepared by mentorship training to carry out this work. Mentor training itself further assists in implementing the standards in the schools.

# 8 Final Remarks and Outlook

The study describes the process of the development of standards for vocational teachers at bachelor level in Lao PDR and proposes actions for the following implementation process. The process of development was permanently based on a theoretical foundation and involved important stakeholders. Thus it is similar to the common process for developing standards (cp. Frey/Jung 2011).

Regarding the educational level, the drafted standards apply to be vocational teachers at bachelor level and the indicators are formulated accordingly. If in the future an extension is possible and feasible, these standards could provide a good starting position and cover the master level as the next step up on the career ladder.

The result – presented in chapter 6 – is a standard for vocational teachers at bachelor level in five different areas with a total of 80 indicators. It must be noted that the development of standards for vocational teachers is a difficult process for there a only a few comparable standards available that could possibly have served as a role model (cp. Wilbers 2010, 33). In this regard every state is challenged when attempting to develop specific standards for vocational teachers.[12]

Concerning the proposals for implementation (see Chapter 7) it is also pertinent to note there are no recorded documentations or evaluations concerning the process of implementation of standards for vocational teachers exist. What looms and is so conspicuous by its absence forms a remarkable research gap.

The standards for vocational teachers could well prove to be an important milestone for improving the quality of TVET in Lao PDR, is successfully implemented.

As mentioned in Chapter 3 it is necessary to review the developed standards periodically to prevent them becoming outdated. Therefore we strongly recommend conducting an evaluation of the standards in approximately five years. The evaluation should have two goals: First, to show which of the standards (as a whole standard or regarding single competencies or indicators) are appropriate and which turn out to be improbable or unrealistic. Secondly, to review whether or not implementation has been successful and in which way the application of the standards should be further supported.

To improve the quality of the education of vocational teachers in a sustainable way, we recommend going beyond the measures already described, by complementing this top-down process with a bottom-up one. That teachers at vocational schools are insufficiently qualified has been shown not only in different studies but by the schools themselves witnessing deficits. The schools can provide many more details and express their own needs. We recommend to record a qualitative survey of different vocational schools (in urban and in rural areas) dealing precisely with these questions. In addition to the focus on the standards such a study would provide valuable information for the improvement of curricula for the training and education of vocational teachers.

The research team is looking forward to witnessing the implementation of the standards. We thank everyone involved in this research, particularly

- the Faculty of Engineering at the University of Laos for its willingness in carrying out the study and providing the required manpower;
- the Ministry of Education and Sports of Laos for commissioning the study and provide valuable information;

12 In Germany, for example, intensive discussions on how to formulate standards for vocational teacher are coming up.

- vocational schools in Laos for communicating the specific needs of the demanding institutions;
- the Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH for providing the necessary financial resources without which the study would not have been possible;
- the Regional Cooperation Platform for facilitating the exchange of experiences and expertise between its member institutes, crucial for the accomplishment of this study and providing scientific advice;
- the member institutes of RCP for providing valuable contributions and making their experience and expertise available.

The research team hopes that the aforementioned institutions benefit from the results of the study and receive a valuable reward for the support provided in terms of the developed standards.

## References


ADB (2010a). Lao People's Democratic Republic: Strengthening Technical and Vocational Education and Training Project. Online: http://www.adb.org/sites/default/files/projdocs/2010/42278-02-lao-rrp.pdf. (retrieved 16.12.2012).

ADB (2010b). Labour Market Assessment: Strengthening Technical and Vocational Education and Training Project. Online: http://www2.adb.org/Documents/RRPs/LAO/42278/42278-02-lao-oth-01.pdf. (retrieved 16.12.2012)

Beck, K. (2005). Standards für die Ausbildung von Berufsschullehrern in Europa - Professionalisierung im Kompetenzkorsett? Arbeitspapiere WP 52. Lehrstuhl für Wirtschaftspädagogik, Johannes Gutenberg-Universität Mainz.

Benveniste, L. et al. (2007). Teaching in Lao PDR. Washington DC.

Bergmann, H. & Aidan, M. (2011). Standards for Quality in Education. Experiences from Different Countries and Lessons Learnt. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Eschborn. Online: http://www2.gtz.de/dokumente/bib-2011/giz2011-0093en-standards-quality-education.pdf. (retrieved 23.11.2012).

Billet, S. (2009a). Changing work, work practice: The consequences for vocational education. In: Maclean, Rupert; Wilson, David N. (eds.): International handbook of education for the changing world of work. London: Dordrecht, 175-187.

Billet, S. (2009b). Vocational learning: Contributions of workplaces and educational institutions. In: Maclean, R. & Wilson, D. N. (eds.): International handbook of education for the changing world of work. London: Dordrecht, 1711-1725

Bloom, B. et al. (1956). Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain. New York.

CCSSO (2011). InTASC Model Core Teaching Standards: A Resource for State Dialogue, Washington DC.

Dittrich, J. (2010). Perspectives for intra-Asian cooperation in TVET. In: Proceedings of the 2010 ASEAN-CHINA International Forum on Vocational Education and Training. Beijing, 242-253.

Fischer, M. & Boreham, N. (2009). Work process knowledge. In: Rauner, F. & Maclean, R. (eds.): Handbook of Technical and Vocational Education and Training Research. Berlin, 466-474.

Frey, A. & Jung, C. (2011). Kompetenzmodelle und Standards in Lehrerbildung und Lehrerberuf. In: Terhard, E. et al. (eds.): Handbuch der Forschung zum Lehrerberuf. Münster, 540-572.

Gerds, P. (2009). Standards for occupation-directed professional development of TVET personnel in developing countries. In: Maclean, R. & Wilson, D. N. (eds.): International handbook of education for the changing world of work. London: Dordrecht, 1407-1422

Hartmann, M. (2012). Berufsbild für Lehrkräfte berufsbildender Schulen als Grundlage für Lehrerprofessionalität. In: Becker, M., Spöttl, G. & Vollmer, T. (eds.): Lehrerbildung in Gewerblich-Technischen Fachrichtungen. Bielefeld, 97–118.

Hattie, J. A. C. (2009). Visible Learning. A Synthesis of over 800 Meta-Analyses relating to Achievement. London, New York.

Klieme, E. et al. (2007). Zur Entwicklung nationaler Bildungsstandards. Eine Expertise. Bundesministerium für Bildung und Forschung (BMBF), Referat Bildungsforschung, Berlin.

KMK (2004). Standards für die Lehrerbildung: Bildungswissenschaften. Beschluss der Kultusministerkonferenz vom 16.12.2004. Sekretariat der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland. Online: http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2004/2004_12_16-Standards-Lehrerbildung.pdf. (retrieved: 19.4.2012).

KMK (w/o year). Standards für die Lehrerbildung: Bericht der Arbeitsgruppe. Sekretariat der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland. Online: http://www.kmk.org/fileadmin/pdf/Bildung/AllgBildung/Standards_Lehrerbildung-Bericht_der_AG.pdf. (retrieved 19.4.2012).

Lao People's Revolutionary Party (2011). IX Party Congress 2011 – Report, Vientiane.

McWalters, P. et al. (2010). Updating the INTASC Model Core Teaching Standards: What Does Effective Teaching Look Like Today? Online: http://www.pearsonassessments.com (retrieved 21.09.2012).

MoE (2007). Strategic Plan for the Development of TVET from 2006 up to 2020, Vientiane.

MoE (2008). National Education System Reform Strategy (NESRS) 2006–2015, Vientiane.

MoE (2008a). The Development of Education, National Report: Lao People's Democratic Republic, 48th International Conference of Education, Geneva, 25-28 November 2008, Vientiane. Online: www.ibe.unesco.org/.../ICE.../laoPDR_NR08.pdf (retrieved 04.07.2012).

MoE (2009). Education Sector Development Framework (ESDF) 2009-2015, Vientiane.

MoE (2010). Decree No. 1232, Standards of Teachers, Vientiane.

MoE (2011). Decree No. 976, Vocational Teacher Education Department, Vientiane.

MoES (2012). National Standards of Curricula (Draft), Vientiane.

MoLISA (2010). Circular No. 30/2010/TT, Professional Standard Regulation for Vocational Lecturers, Teachers, Hanoi.

MPI (2010). Seventh National Socio-Economic Development Plan (2011-2015) – Draft, Executive Summary, unofficial translation from original Lao version, Vientiane.

Nam News Network (2010). Laos is short of skilled Labour – ADB Study. Online: http://news.brunei.fm/2010/03/29/laos-is-short-of-skilled-labour-adb-study/. (retrieved 19.08.2010).

Government of Lao PDR (2011). Higher Education to be further conducted. Online: http://www.laopdr.gov.la/ePortal/news/detail.action;jsessionid=gp1JTf1F1mtj26VFLm2KWnV13sv4

Z9h3VsjhCJp1p72b4KW3MTj2!260949307?id=27089&from=ePortal_NewsDetail_FromHome. (retrieved 30.08.2012).

PMO (2010). Decree No. 036, TVET and Skills Development, Vientiane.

PMO (2012). Decree No. 177, Public Teachers, Vientiane.

QualiVET Project Group (2007). Quality Development Framework (QDF). Guideline, Shaping Oriented Indicators, Team Concept. Impuls 31. Nationale Agentur beim Bundesinstitut für Berufsbildung. Bonn.

Searle, J. (2009). Literacy and Learning: Are TVET Professionals Facilitators of Learning or Deliverers of Knowledge and Skills? In: Maclean, R. & Wilson, D. N. (eds.): International handbook of education for the changing world of work. London: Dordrecht, 1259-1270.

Singthilath, T. (2012). Report on the previous Measures related to the Improvement of the Education of Vocational Teachers, presented during a workshop on the Development of Standards for the non-academic Education of Vocational Teachers, conducted by VEDC on 20th/21st March 2012, Thalat/Vientiane Province.

SIREP (2010). Teaching Competency Standards in Southeast Asian Countries, Phillipines.

Sisoulath, S. et al. (2007). Public Technical Vocational Schools under the Ministry of Education in Lao P.D.R., Vientiane.

Soysouvanh, B. et al. (2011). Institutional Development of Vocational Teacher Education in Lao PDR 2010–2020, Vientiane.

Spöttl, G. (2009). Teacher education for TVET in Europe and Asia: the comprehensive requirements. Journal of technical education and training, 1 (1). 1-16. Online: http://eprints.uthm.edu.my/550/1/JTET_Vol1_F1.pdf (retrieved 3.10.2011).

Spöttl, G. & Becker, M. (2012). Wissenschaftsbezüge und Standards für ein gewerblich-technisches Lehrerbildungsstudium. In: Becker, M., Spöttl, G. & Vollmer, T. (eds.): Lehrerbildung in Gewerblich-Technischen Fachrichtungen. Bielefeld, 35–64.

TDA (2007). Professional Standards for Teachers, London. Online: www.rbkc.gov.uk/pdf/standards_core.pdf (retrieved 04.07.2012).

TT-TVET Consortium (2009). Quality indicators and shaping measures as standards in TVET teacher education. In: Dittrich et al. (eds). Standardization in TVET teacher education. Frankfurt and others, 151-162.

UNDP (2010). Country Program Strategy; GEF Small Grants Program Lao PDR.

UNESCO (1996). Learning: The Treasure within. Online: http://collections.infocollections.org/ukedu/en/d/Jh1767e/3.1.html (retrieved 08.09.2012).

UNESCO (2011). UNESCO ICT Competency Framework for Teachers, Paris.

UNESCO (2012). Technical and Vocational Education and Training (TVET), Policy Review of Lao PDR's TVET System – Draft U.S. Department of State. Online: http://www.state.gov/r/pa/ei/bgn/2770.htm (retrieved 03.06.2012).

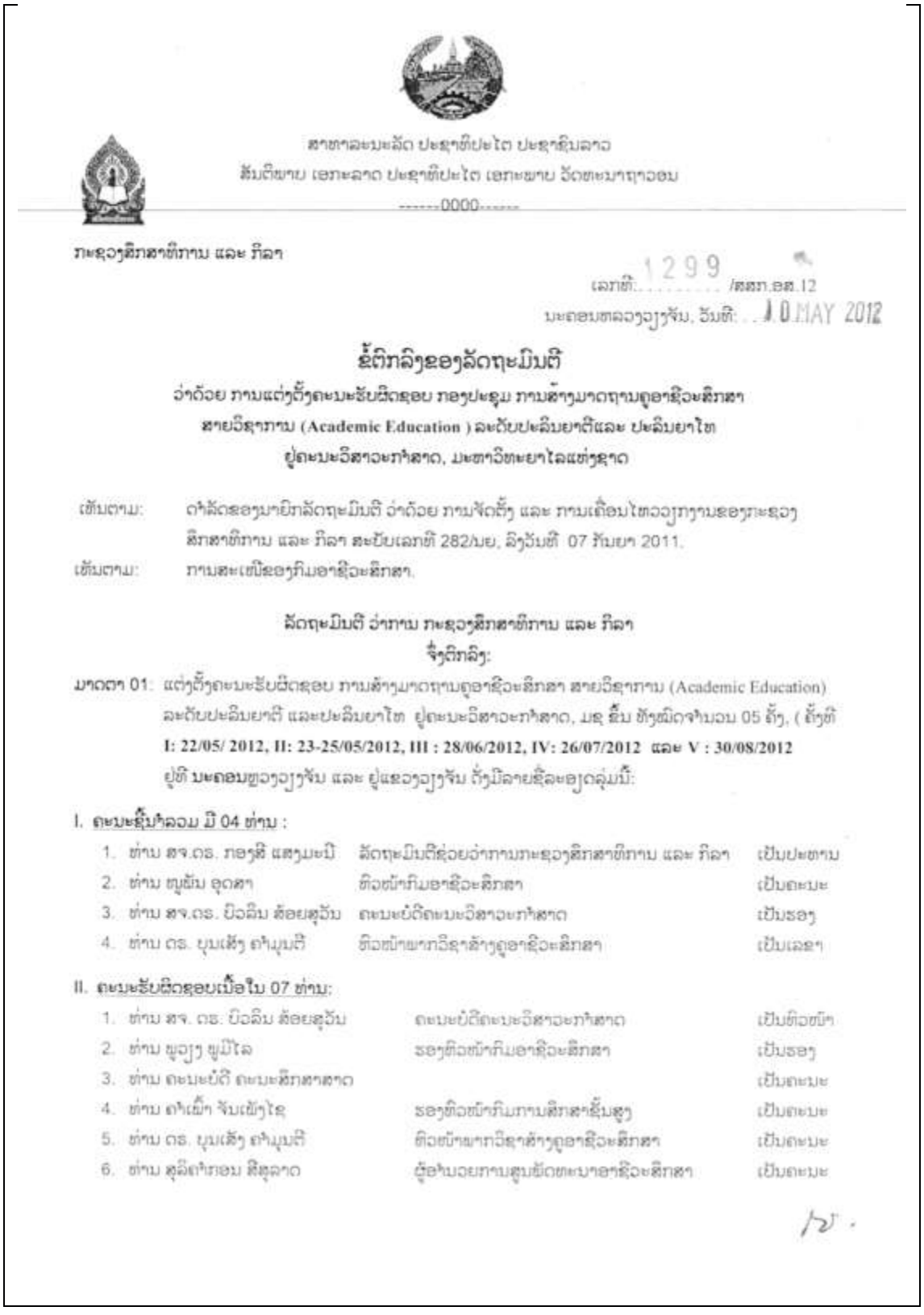
Wilbers, K. (2010). Standards für die Aus- und Weiterbildung berufspädagogischer Professionals. In: Nickolaus et al. (eds.): Handbuch Berufs- und Wirtschaftspädagogik. Bad Heilbrunn, 33-36.

World Bank (2010). Transforming Indonesia's Teaching Force. Volume II: From Pre-service Training to Retirement: Producing and Maintaining a High-quality, Efficient, and Motivated Workforce. Report No. 53732-ID, World Bank Office Jakarta.

Zhao, Z. & Lu, L. (2009). TVET teachers and their professionalization in China: A problem analysis. In Maclean, R. & Wilson, D. (eds.): International handbook of education for the changing world of work. Dordrecht, London. 1229-1242.

# Annexes

Annex 1: MoES – Official Assignment for the Development of Standards for Vocational Teachers in Lao PDR



ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນລາວ
ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະນາຖາວອນ
------0000------

ກະຊວງສຶກສາທິການ ແລະ ກິລາ

ເລກທີ: 1299 /ສສກ.ອສ.12
ນະຄອນຫລວງວຽງຈັນ, ວັນທີ: 10 MAY 2012

## ຂໍ້ຕົກລົງຂອງລັດຖະມົນຕີ

ວ່າດ້ວຍ ການແຕ່ງຕັ້ງຄະນະຮັບຜິດຊອບ ກອງປະຊຸມ ການສ້າງມາດຖານຄູອາຊີວະສຶກສາ
ສາຍວິຊາການ (Academic Education) ລະດັບປະລິນຍາຕີແລະ ປະລິນຍາໂທ
ຢູ່ຄະນະວິສາວະກຳສາດ, ມະຫາວິທະຍາໄລແຫ່ງຊາດ

- ອີງຕາມ: ດຳລັດຂອງນາຍົກລັດຖະມົນຕີ ວ່າດ້ວຍ ການຈັດຕັ້ງ ແລະ ການເຄື່ອນໄຫວວຽກງານຂອງກະຊວງ ສຶກສາທິການ ແລະ ກິລາ ສະບັບເລກທີ 282/ນຍ, ລົງວັນທີ 07 ກັນຍາ 2011.
- ອີງຕາມ: ການສະເໜີຂອງກົມອາຊີວະສຶກສາ.

ລັດຖະມົນຕີ ວ່າການ ກະຊວງສຶກສາທິການ ແລະ ກິລາ
ຈຶ່ງຕົກລົງ:

ມາດຕາ 01: ແຕ່ງຕັ້ງຄະນະຮັບຜິດຊອບ ການສ້າງມາດຖານຄູອາຊີວະສຶກສາ ສາຍວິຊາການ (Academic Education) ລະດັບປະລິນຍາຕີ ແລະປະລິນຍາໂທ ຢູ່ຄະນະວິສາວະກຳສາດ, ມຊ ຂຶ້ນ ທັງໝົດຈຳນວນ 05 ຄັ້ງ, ( ຄັ້ງທີ I: 22/05/ 2012, II: 23-25/05/2012, III : 28/06/2012, IV: 26/07/2012 ແລະ V : 30/08/2012 ຢູ່ທີ ນະຄອນຫຼວງວຽງຈັນ ແລະ ຢູ່ແຂວງວຽງຈັນ ດັ່ງມີລາຍຊື່ລະອຽດລຸ່ມນີ້:

I. ຄະນະຊີ້ນຳລວມ ມີ 04 ທ່ານ :

| | | | |
|---|---|---|---|
| 1. | ທ່ານ ສຈ.ດຣ. ກອງສີ ແສງມະນີ | ລັດຖະມົນຕີຊ່ວຍວ່າການກະຊວງສຶກສາທິການ ແລະ ກິລາ | ເປັນປະທານ |
| 2. | ທ່ານ ໜູພັນ ອຸດສາ | ຫົວໜ້າກົມອາຊີວະສຶກສາ | ເປັນຄະນະ |
| 3. | ທ່ານ ສຈ.ດຣ. ບົວລົມ ສ້ອຍສຸວັນ | ຄະນະບໍດີຄະນະວິສາວະກຳສາດ | ເປັນຮອງ |
| 4. | ທ່ານ ດຣ. ບຸນເສີງ ຄຳມຸນຕີ | ຫົວໜ້າພາກວິຊາສ້າງຄູອາຊີວະສຶກສາ | ເປັນເລຂາ |

II. ຄະນະຮັບຜິດຊອບເນື້ອໃນ 07 ທ່ານ:

| | | | |
|---|---|---|---|
| 1. | ທ່ານ ສຈ. ດຣ. ບົວລົມ ສ້ອຍສຸວັນ | ຄະນະບໍດີຄະນະວິສາວະກຳສາດ | ເປັນຫົວໜ້າ |
| 2. | ທ່ານ ພູວຽງ ພູມີໄລ | ຮອງຫົວໜ້າກົມອາຊີວະສຶກສາ | ເປັນຮອງ |
| 3. | ທ່ານ ຄະນະບໍດີ ຄະນະສຶກສາສາດ | | ເປັນຄະນະ |
| 4. | ທ່ານ ຄຳເພົ້າ ຈັນເພັງໄຊ | ຮອງຫົວໜ້າກົມການສຶກສາຊັ້ນສູງ | ເປັນຄະນະ |
| 5. | ທ່ານ ດຣ. ບຸນເສີງ ຄຳມຸນຕີ | ຫົວໜ້າພາກວິຊາສ້າງຄູອາຊີວະສຶກສາ | ເປັນຄະນະ |
| 6. | ທ່ານ ສຸລິຄຳຮອນ ສີສຸລາດ | ຜູ້ອຳນວຍການສູນພັດທະນາອາຊີວະສຶກສາ | ເປັນຄະນະ |

7. ທ່ານ ສົມລິດ ວິຣິວົງ ຜູ້ອຳນວຍການໂຮງຮຽນເຕັກນິກ ລາວ-ເຢັຈ໋ລະມັນ ເປັນຄະນະ

III. ຜູ້ຊ່ວຍວຽກ 04 ທ່ານ ຈາກຄະນະວິສາວະກຳສາດ:

1. ທ່ານ ສົມສະນິດ ລາວັນ
2. ທ່ານ ຜ່ານນະວົງ ບຸນສຸກ
3. ທ່ານ ນ. ສຸກກະເສີມ ສະເຫຼີມສີ
4. ທ່ານ ນ. ແສງມະນີ ພຸ່ນພົມມະລິນ

ມາດຕາ 02: ລັດຖະກອນຖະກອນທີ່ບົ່ງໄວ້ໃນມາດຕາ 01 ມີໜ້າທີ່ຊີ້ນຳໆພາຈັດຕັ້ງກອງປະຊຸມ, ຮັບຕິດຮ່ອນ ຕາມຫົດ ແລະ ໜ້າທີ່ຂອງໃສລາວ ເຮັດໃຫ້ວຽກງານສຳເລັດຕົນຕາມຄາດໝາຍ ແລະ ພາຍຫຼັງສຳເລັດ ກອງປະຊຸມ ແລ້ວໃຫ້ລາຍງານຂັ້ນເທິງຕາມເວລາອັນຄວນ, ລັດຖະກອນທີ່ລະບຸໄວ້ໃນມາດຕາ: 01 ມີສິດໄດ້ຮັບນະໂຍບາຍຕາມລະບຽບຫລັກການໆເງິນວາງອອກ.

ມາດຕາ 03: ກອງປະຊຸມ ການສ້ຽມມາດຖານ ຄູອາຊີວະສຶກສາໃນຄັ້ງນີ້ ແມ່ນນຳໃຊ້ງົບປະມານຈາກໂຄງການ **HRD ME** ແຫ່ງ ປະເທດ ເຢັຈ໋ລະມັນ ແລະ ໂຄງການ **Regional Co-0peration Platform ( RCP )**.

ມາດຕາ 04: ໃຫ້ຫ້ອງການຊວງການສຶກສາທິການ ແລະ ກິລາ,ກົມຈັດຕັ້ງ-ພະນັກງານ,ກົມການເງິນ,ກົມອາຊີວະສຶກສາ, ກົມການສຶກສາຊັ້ນສູງ ,ຄະນະວິສາວະກຳສາດ,ມະຫາວິທະຍາໄລ ແຫ່ງຊາດ ແລະ ພາກສ່ວນທີ່ກ່ຽວ ຂ້ອງ ຈົ່ງພ້ອມກັນ ປະຕິບັດ ຂໍ້ຕົກລົງ ສະບັບນີ້ ຕາມໜ້າທີ່ຂອງໃສລາວ.

ມາດຕາ 05: ຂໍ້ຕົກລົງສະບັບນີ້ ມີຜົນສັກສິດນຳໃຊ້ ນັບແຕ່ວັນທີລົງລາຍເຊັນເປັນຕົ້ນໄປ.

ລັດຖະມົນຕີວ່າການກະຊວງສຶກສາທິການ ແລະ ກິລາ,

ບ່ອນສົ່ງ:

- ຫ້ອງການກະຊວງສຶກສາທິການ ແລະ ກິລາ 02 ສະບັບ
- ກົມຈັດຕັ້ງ-ພະນັກງານ 01 ສະບັບ
- ກົມການເງິນ 01 ສະບັບ
- ກົມການສຶກສາຊັ້ນສູງ 01 ສະບັບ
- ກົມອາຊີວະສຶກສາ 01 ສະບັບ
- ຄະນະວິສະວະກຳສາດ,ມຊ 01 ສະບັບ
- ພາກວິຊາກ່ຽວຂ້ອງເກັບມ້ຽນ 02 ສະບັບ

ຮສ.ດຣ ກອງສີ ແສງມະນີ

Annex 2: National Qualification Framework (NQF) – Aspects and Descriptors

**Level 1:**

| **Aspects** | **Descriptors** |
|---|---|
| Knowledge And Understanding | Demonstrate and/or work with knowledge of simple facts and ideas in a subject/discipline. |
| Practice: Applied Knowledge And Understanding | • Relate knowledge to a few simple everyday contexts with prompting.<br>• Use a few very simple skills.<br>• Carry out, with guidance, a few familiar tasks.<br>• Use, under supervision, basic tools and materials. |
| Generic Cognitive Skills | • Use rehearsed stages for solving problems.<br>• Operate in personal and/or everyday contexts.<br>• Take some account, with prompting, of identified consequences of action. |
| Communication, ICT and Numeracy skills | Use very simple skills with assistance, for example:<br>• Produce and respond to a limited range of very simple written and oral communication in familiar/routine contexts.<br>• Carry out a limited range of very simple tasks to process data and access information.<br>• Use a limited range of very simple and familiar numerical and graphical data in familiar and everyday contexts. |
| Autonomy, accountability and working with others | • Work alone or with others on simple routine, familiar tasks under frequent and directive supervision.<br>• Identify, given simple criteria, some successes and/or failures of the work |

**Level 2:**

| **Aspects** | **Descriptors** |
|---|---|
| Knowledge and understanding | Demonstrate and/or work with:<br>• Basic knowledge in a subject/discipline.<br>• Simple facts and ideas associated with a subject/discipline. |
| Practice: applied knowledge and understanding | Relate knowledge with some prompting to personal and/or everyday |
| Generic cognitive skills | • Identify with some prompting a process to deal with a situation or issue.<br>• Operate in familiar contexts using given criteria.<br>• Take account of some identified consequences of action. |
| Communication, ICT and numeracy skills | Use simple skills, for example:<br>• Produce and respond to simple written and oral communication in familiar, routine contexts.<br>• Carry out simple tasks to process data and access information.<br>• Use simple numerical and graphical data in everyday contexts. |
| Autonomy, accountability and working with others | • Participate in the setting of goals, timelines, etc.<br>• Participate in the review of completed work and the identification of ways of improving practices and processes.<br>• Identify, given simple criteria, own strengths and weaknesses relative to the work. |

**Level 3:**

| Aspects | Descriptors |
|---|---|
| Knowledge and understanding | Demonstrate and/or work with:<br>• Basic knowledge in a subject/discipline which is mainly factual.<br>• Some simple facts and ideas about and associated with a subject/discipline.<br>• Knowledge of basic processes, materials and terminology. |
| Practice: applied knowledge and understanding | • Relate knowledge to personal and/or practical contexts.<br>• Use a few skills to complete straightforward tasks with some non-routine elements.<br>• Select and use, with guidance, appropriate tools and materials safely and effectively. |
| Generic cognitive skills | • Use, with guidance, given stages of a problem-solving approach to deal with a situation or issue.<br>• Operate in straightforward contexts.<br>• Identify and/or take account of some of the consequences of action/ inaction. |
| Communication, ICT and numeracy skills | Use straightforward skills, for example:<br>• Produce and respond to simple but detailed written and oral communication in familiar contexts.<br>• Use the most straightforward features of familiar applications to process and obtain information.<br>• Use straightforward numerical and graphical data in straightforward and familiar contexts. |
| Autonomy, accountability and working with others | • Work alone or with others on straightforward tasks.<br>• Contribute to the setting of goals, timelines, etc.<br>• Contribute to the review of completed work and offer suggestions for improving practices and processes.<br>• Identify own strengths and weaknesses relative to the work. |

**Level 4:**

| Aspects | Descriptors |
|---|---|
| Knowledge and understanding | Demonstrate and/or work with:<br>• Basic knowledge in a subject/discipline which is mainly factual but has some theoretical component.<br>• A range of simple facts and ideas about and associated with a subject/discipline.<br>• Knowledge and understanding of basic processes, materials and terminology. |
| Practice: applied knowledge and understanding | • Relate ideas and knowledge to personal and/or practical contexts.<br>• Complete some routine and non-routine tasks using knowledge associated with a subject/ discipline.<br>• Plan and organize both familiar and new tasks.<br>• Select appropriate tools and materials and use safely and effectively (e.g. without waste).<br>• Adjust tools where necessary following safe practices. |
| Generic cognitive skills | • Use a problem-solving approach to deal with a situation or issue that is straightforward in relation to a subject/discipline. |

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| | • Operate in a familiar context, but where there is a need to take account of or use additional information of different kinds, some of which will be theoretical or hypothetical.<br>• Use some abstract constructs - for example make generalisations and/or draw conclusions. |

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| Communication, ICT and numeracy skills | Use a range of routine skills, for example:<br>• Produce and respond to detailed written and oral communication in familiar contexts.<br>• Use standard applications to process, obtain and combine information.<br>• Use a range of numerical and graphical data in straightforward context that have some complex features. |
| Autonomy, accountability and working with others | • Work alone or with others on tasks with minimum supervision.<br>• Agree goals and responsibilities for self and/or work team with manager/ supervisor.<br>• Take leadership responsibility for some tasks.<br>• Show an awareness of others' roles, responsibilities and requirements in carrying out work and make a contribution to the evaluation and improvement of practices and processes. |

**Level 5:**

| **Aspects** | **Descriptors** |
|---|---|
| Knowledge and understanding | Demonstrate and/or work with:<br>• Generalised knowledge of a subject/discipline;<br>• Factual and theoretical knowledge.<br>• A range of facts, ideas, properties, materials, terminology, practices, techniques about/associated with a subject/discipline.<br>Relate the subject/discipline to a range of practical and/or everyday applications. |
| Practice: applied knowledge and understanding | • Apply knowledge and understanding in known, practical contexts.<br>• Use some of the basic, routine practices, techniques and/or materials associated with a job/ in routine contexts which may have non-routine elements.<br>• Plan how skills will be used to address set situations and/or problems and adapt these as necessary. |
| Generic cognitive skills | • Obtain, organise and use factual and theoretical information in problem solving.<br>• Make generalisations and predictions.<br>• Draw conclusions and suggest solutions. |
| Communication, ICT and numeracy skills | • Use a wide range of skills, for example:<br>• Produce and respond to detailed and relatively complex written and oral communication in both familiar and unfamiliar contexts.<br>• Select and use standard applications to process, obtain and combine information.<br>• Use a wide range of numerical and graphical data in routine contexts which may have non-routine elements. |
| Autonomy, accountability | • Take responsibility for carrying out of a range of activities where the overall goal is clear, under non-directive supervision. |

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| and working with others | • Take some supervisory responsibility for the work of others and lead established teams in the implementation of routine work.<br>• Manage limited resources within defined and supervised areas of work.<br>• Take account of roles and responsibilities related to the tasks being carried out and take a significant role in the evaluation of work and the improvement of practices and processes. |

Annex 3: Education Sector Development Framework (ESDF) – legal Regulations

| No. | Reg.No / Name | Promulgated by | Short description of the content |
|---|---|---|---|
| **1.** | No. 35/PM<br>Vientiane,<br>04 April 2002<br><br>**Decree on nomination of the NTC members** | Prime Minister | • Mandate of NTC<br>• Nomination of president, vice-presidents and members of NTC<br>• Establishment and venue of NTC-Permanent Office<br>• Rights and obligations of NTC President and Vice Presidents |
| **2.** | No. 1327/NTC.02<br>Vientiane,<br>09 September 2002<br><br>**Decree on the Structure, the Tasks and Functions of NTC** | President of NTC and Minister of Education | 1. Elaboration of policy and guidelines for the development of VET,<br>2. Elaboration of policy and guidelines for the financing of VET,<br>3. Elaboration of suggestion for the establishment and management of the "National Vocational Training Fund"<br>4. Discussion of the master plan for the development of VET,<br>5. Elaboration of national professional standards, curricula, examination and certification standards,<br>6. Discussion of plans for the establishment and development of technical and vocational schools according to the criteria of MoE,<br>7. Discussion of national plans for qualification and further qualification of vocational teachers and trainers and regulation of social positioning of vocational teachers/trainers. |
| **3.** | Decree of NTC President<br>No. 425/NTC/03<br>Vientiane, 20.03.03<br><br>**Establishment of Trade Working Groups (TWG)** | President of NTC and Minister of Education | • Composition of TWG<br>• Role, rights and tasks of TWG<br>• Working principles<br>• Regulations for implementation |

| | | | |
|---|---|---|---|
| **4.** | Reg. No: 04 NA Vientiane, Date: 03.07.2007<br><br>**Law on Education** | NA, President of Lao PDR | • General provisions<br>• Education system<br>• Education institutions<br>• Education curricula<br>• Learners<br>• Education personnel<br>• Society and education<br>• Investment in education<br>• Administration, inspection and Assessment of education |

| | | | |
|---|---|---|---|
| **5.** | Reg. No. 137/PM Vientiane, Datum: 03.05.2007<br><br>**Strategic Plan for Development of Technical, Vocational Education and Training up to 2020** | PMO | • Visions, Goals<br>• Strategy for Development TVET<br>o Construction, improvement and expansion of TVET institutions<br>o TVET reform<br>o pre-service and in-service training and development of TVET teacher and administrative personnel<br>o TVET quality assurance<br>o Development of TVET Information System<br>o Improvement of TVET management apparatus<br>o Formulation of policy and establishment of management mechanisms for TVET development<br>• Measures for the Implementation |
| **6.** | Reg.2016./PMO Vientiane, Datum: 17.11.2008<br><br>**Approval of Master Plan for TVET Development of Lao PDR 2008-2015** | | • The construction, upgrading and expansion of the TVET Institutions;<br>• The qualifications, training and professional development of TVET teachers and other staff;<br>• The quality assurance of TVET;<br>• The development of TVET information resources;<br>• The improvement of the organizational structure of the TVET sector;<br>• The formulation of policy and tools at the macro-level for the development of TVET<br>• Financing for TVET Development |
| **7.** | Release No. 2354/MoE-VT 2004<br><br>**Standard for curricula** | Minister of Education | • Vocational training<br>• Prerequisites for access<br>• Duration of training<br>• Contents of training<br>• Ratio between theory and practice<br>• Credit point system |

| | | | |
|---|---|---|---|
| | | | • Examination and certification |
| **8.** | MoE, 2002<br><br>**The Education strategic vision up to 2020**<br>**Vientiane, Lao PDR**<br>**October 2000** | **Minister of Education** | • Overall Directives<br>• Overall Objectives<br>• Overall Policy<br>• Overall Targets<br>• Methods |

Annex 4: England (TDA) – Professional Standards for Teachers (short version)

| **Training and Development Agency for Schools (TDA), September 2007** | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| These professional standards provide the **framework for a teacher's career** and clarify the **professional characteristics** that a teacher should be expected to maintain and to build on at their current career stage. Therefore they are statements of a teacher's **professional attributes**, **professional knowledge and understanding**, and **professional skills**. The standards for Post Threshold Teachers, Excellent Teachers and ASTs are **pay standards** and teachers who are assessed as meeting them also access the relevant pay scale. | | | | | | | | | | | | | | | |
| | **Professional Attributes** | | | | **Professional knowledge and understanding** | | | | | | **Professional skills** | | | | | |
| **Career stages** | Relationships with children and young people | Frameworks | Communicating and working with others | Personal professional development | Teaching and learning | Assessment and monitoring | Subjects and curriculum | Literacy, numeracy and ICT | Achievement and diversity | Health and well-being | Planning | Teaching | Assessing, monitoring and giving feedback | Reviewing teaching and learning | Learning environment | Team working and collaboration |
| QTS (Q) | Q1-2 | Q3 | Q4-6 | Q7-9 | Q10 | Q11-13 | Q14-15 | Q16-17 | Q18-20 | Q21 | Q22-24 | Q25 | Q26-28 | Q29 | Q30-31 | Q32-33 |

| Those recommended for the award of QTS should: | Demonstrate the positive values, attitudes and behaviour they expect from children and young people. | Be aware of the professional duties of teachers and the statutory framework within which they work. | Communicate effectively with children, young people, colleagues, parents and carers. | Act upon advice and feedback and be open to coaching and monitoring. | Have a (...) understanding of a range of teaching (...) strategies and know how to use and adapt them, (...). | Know the assessment requirements and arrangements fort he subjects (...) they are trained to teach, (...). | Have a secure knowledge and understanding of their subject (...) and related pedagogy (...). | Know how to use skills in literacy (...) to support their teaching and wider professional activities. | Understand how children (...) develop and that the progress and well-being of learners are affected by (...) | Be aware of the current legal requirements (...) on the safeguarding (...) of the well-being (...) | Plan homework (…) to sustain learners' progress and to extend and consolidate their learning. | Teach lessons and sequences of lessons across the age and ability range for which they are trained (…) | Make effective use of a range of assessment, monitoring and recording strategies. | Provide timely, accurate and constructive feedback on learners' attainment, progress (…). | Establish a purposeful and safe learning environment (…). | Work as a team member and identify opportunities for working with colleagues (…). |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Core (C) | C1-2 | C3 | C4-6 | C7-9 | C10 | C11-14 | C15-16 | C17 | C18-21 | C22-25 | C26-28 | C29-30 | C31-34 | C35-36 | C37-39 | C40-41 |
| PT (P) | | P1 | | | P2 | P3-4 | P5 | | | P6 | P7 | P8 | | | | P9-10 |
| ET (E) | | E1 | | E2 | E3 | E4 | E5 | | E6 | | E7 | E8-9 | E10-11 | E12 | | E13-15 |
| AST (A) | | A1 | | | | | | | | | | | | | | A2-3 |

**QTS**: Qualified Teacher Status; **C**: Core; **PT**: Post Threshold Teachers; **ET**: Excellent Teachers; **AST**: Advanced Skills Teachers

Annex 5: Germany (KMK) – Standards für die Lehrerbildung: Bildungswissenschaften (short version)

<table>
<tr><td colspan="8">Decision of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (16th December 2004)</td></tr>
<tr><td colspan="8">Standards in teacher education describe requirements imposed on the acting of teachers. They are related to competencies and thus to abilities, skills and attitudes, teachers have to have to their disposal to tackle their professional requirements. The teacher education in Germany is divided into two phases, the academic phase (at University) and the practical phase (at School). The following catalogue of standards distinguishes as well between these both phases.</td></tr>
<tr><td colspan="2">Area of Competence: Teaching</td><td colspan="2">Area of Competence: Educating</td><td colspan="2">Area of Competence: Assessing</td><td colspan="2">Area of Competence: Innovating</td></tr>
<tr><td colspan="2">Teachers are experts for teaching and learning.</td><td colspan="2">Teachers exercise their educational task.</td><td colspan="2">Teachers exercise their assessment task in a fair and responsible manner.</td><td colspan="2">Teachers develop their skills constantly.</td></tr>
<tr><td colspan="2">Competency 1: Teachers plan lessons professionally and appropriately and carry out these lessons in a factual and professional correct manner.</td><td colspan="2">Competency 4: Teachers know the social and cultural living conditions of learners and influence their individual development within the context of school.</td><td colspan="2">Competency 7: Teachers diagnose learning preconditions and learning processes of learners; they support learners well-directed and advise learners and their parents.</td><td colspan="2">Competency 9: Teachers are aware of the specific requirements of their profession. They understand their profession as a public office, encompassing specific responsibilities and obligations.</td></tr>
<tr><td>Standards of the academic phase</td><td>Standards of the practical phase</td><td>Standards of the academic phase</td><td>Standards of the practical phase</td><td>Standards of the academic phase</td><td>Standards of the practical phase</td><td>Standards of the academic phase</td><td>Standards of the practical phase</td></tr>
<tr><td><u>Example:</u> Graduates not only know general and subject-oriented didactics, but also know what has to be considered preparing a lesson.</td><td><u>Example:</u> Graduates connect subject-specific and didactical criteria whilst preparing and designing lessons.</td><td><u>Example:</u> Graduates know intercultural dimensions, which has to be considered designing educational processes.</td><td><u>Example:</u> Graduates observe the cultural and social diversity in the relevant study group.</td><td><u>Example:</u> Graduates know how different learning conditions affect teaching and learning and how these conditions have to be taken into account</td><td><u>Example:</u> Graduates recognize stages of development, learning potentials, learning obstacles and learning progresses.</td><td><u>Example:</u> Graduates know know the main findings of mental stress research.</td><td><u>Example:</u> Graduates learn how to deal with stress.</td></tr>
<tr><td colspan="2">Competency 2: Teachers support the learning process of learners through the design of appropriate learning situations. They motivate</td><td colspan="2">Competency 5: Teachers impart values and standards and support self-determined decision-making and acting of learners.</td><td colspan="2">Competency 8: Teachers record the performance of learners based on transparent criteria.</td><td colspan="2">Competency 10: Teachers understand their profession as a constant learning process.</td></tr>
</table>

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *learners and empower them to draw connections and to apply their knowledge.* | | | | | | | |
| ***Standards of the academic phase*** | ***Standards of the practical phase*** | ***Standards of the academic phase*** | ***Standards of the practical phase*** | ***Standards of the academic phase*** | ***Standards of the practical phase*** | ***Standards of the academic phase*** | ***Standards of the practical phase*** |
| ***Example:*** *Graduates know Teachers know learning theories and different ways of learning.* | ***Example:*** *Graduates encourage different ways of learning, and support their application.* | ***Example:*** *Graduates know and reflect democratic values and standards and have the knowledge, how to impart them.* | ***Example:*** *Graduates reflect on values and standards and act accordingly.* | ***Example:*** *Graduates know the principles of how to feedback the results of performance assessments.* | ***Example:*** *Graduates give reasons for ratings and reviews and show perspectives for further learning.* | ***Example:*** *Graduates know methods of self- and external evaluation.* | ***Example:*** *Graduates reflect on their own professional experiences and competencies and draw conclusions accordingly.* |
| ***Competency 3:*** *Teachers support the ability of learners to learn and work self-determined.* | | ***Competency 6:*** *Teachers find approachs to solve difficulties and conflicts in schools and in education processes.* | | | | ***Competency 11:*** *Teachers participate in the planning and implementation of school projects and development proposals.* | |
| ***Standards of the academic phase*** | ***Standards of the practical phase*** | ***Standards of the academic phase*** | ***Standards of the practical phase*** | | | ***Standards of the academic phase*** | ***Standards of the practical phase*** |
| ***Example:*** *Graduates know learning and self-motivation strategies that affect positively on learning results and work outcomes.* | ***Example:*** *Graduates impart different learning and working strategies and support their application.* | ***Example:*** *Graduates have knowledge about communication and interaction (in particular considering the teacher-learner interaction)* | ***Example:*** *Graduates create social relations and social learning processes within their teaching.* | | | ***Example:*** *Graduates know know the objectives and methods of school development.* | ***Example:*** *Graduates apply methods and instruments of internal evaluation of the teaching and the school itself.* |
| **11 Standards** | **10 Standards** | **11 Standards** | **9 Standards** | **7 Standards** | **12 Standards** | **10 Standards** | **14 Standards** |

Annex 6: Lao PDR (MoE) – Standards for (general) Teachers (short version)

| Ministry of Education, Decree No 1232 (03rd June 2010) | | |
|---|---|---|
| Handed over to the Teacher Training and Education Department, Provincial Education Divisions, Teaching Development Center and the National Teacher Training and Education Institute to implement the Standard o teachers effectively. | | |
| Group of Characteristics **A** | Group of Characteristics **B** | Group of Characteristics **C** |
| **Attributes and Ethics** | **Knowledge about Learners** | **Knowledge and Ability in Teaching** |
| **1.** Be confident and/or familiar with the communist ideals and the politics and directions of the Lao government. **Indicators 1–5** | **10.** Have knowledge about the development of learners. **Indicators 44–47** | **15.** Teach according to national curricula and create local curricula. **Indicators 66–71** |
| **2.** Believe in national traditions and treat all students equally, without regarding gender, social origin, culture, language, religion and ethnicity. **Indicators 6–10** | **11.** Have knowledge about the basic rights of children. **Indicators 48–51** | **16.** Gain competent knowledge in major subjects, and in subjects being responsible for and know how to implement new knowledge into the teaching – learning process. **Indicators 72–76** |
| **3.** Consider the differences between students and motivate them to respect each other. **Indicators 11–15** | **12.** Understand the impact of the environment and health on the education of the learners. **Indicators 52–56** | **17.** Select and use suitable teaching media. **Indicators 77–79** |
| **4.** Have a conception of life, which can serve as a role model for the students. **Indicators 16–20** | **13.** Know that learners are able to study in many different ways and know how to adapt a broad range of various teaching – learning methods. **Indicators 57–61** | **18.** Create a stimulating environment to motivate students to learn by themselves both inside and outside the classroom. **Indicators 80–84** |
| **5.** Pay attention to students so that they gain a lot of knowledge and finish their education successfully. **Indicators 21–24** | **14.** Support students who need special attention. **Indicators 62–65** | **19.** Lessons must be interested by students and continue. Teachers always realize students' education is core. **Indicators 85–88** |
| **6.** Develop yourself to be prepared for new developments and be responsible for your students' learning results. **Indicators 25–29** | | **20.** Use many methods to evaluate the students' learning results and apply the results to improve your teaching plan. **Indicators 89–92** |

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| **7.** Keep in touch with colleagues, students, parents and other members of the society to tackle upcoming challenges together. **Indicators 30–33** | | **21.** Evaluate the students' learning success according to criteria determined in the national curricula. **Indicators 93–97** |
| **8.** Understand the rights and duties of parents and encourage themto improve the education of the students. They are also responsible for the development and education of their children. **Indicators 34–38** | | **22.** Record the students' learning results systematically. **Indicators 98–103** |
| **9.** Act as an ethical role model for the society and contribute in the support of the diversity of art, culture, tradition on a local as well as on a national level. **Indicators 39–43** | | **23.** Improve your teaching by evaluating yourself and accept observations and recommendations from other people. **Indicators 104–108** |
| | | **24.** Monitor classes effectively. **Indicators 109–111** |
| | | **25.** Create a good atmosphere in the class to motivate students to learn. **Indicators 112–116** |
| | | **26.** Take care for a good relationship between teachers and students. **Indicators 117–121** |
| | | **27.** Encourage students to maintain relationships and to help each other. **Indicators 122–126** |
| | | **28.** Ensure students to learn independently and within a group. **Indicators 127–131** |
| | | **29.** Make yourself familiar with the various cultures and learn the ethnic languages spoken in the area where your workplace is located. **Indicators 132–136** |

Annex 7: USA (CCSSO) – InTASC Model Core Teaching Standards (short version)

| InTASC Model Core Teaching Standards: A Resource for State Dialogue (April 2011) | | | |
|---|---|---|---|
| The Council of Chief State School Officers (CCSSO), through its Interstate Teacher Assessment and Support Consortium (InTASC), is pleased to offer this set of model core teaching standards that outline what teachers should know and be able to do to ensure every K-12 student reaches the goal of being ready to enter college or the workforce in today's world. These standards outline the common principles and foundations of teaching practice that cut across all subject areas and grade levels and that are necessary to improve student achievement. | | | |
| **Category 1** | **Category 2** | **Category 3** | **Category 4** |
| The Learner and Learning | Content | Instructional Practice | Professional Responsibility |
| ***Standard #1:*** *Learner Development* ***The teacher understands how learners grow and*** | ***Standard #4:*** *Content Knowledge* ***The teacher understands the central concepts,*** | ***Standard #6:*** *Assessment* ***The teacher understands and uses multiple methods of assessment*** | ***Standard #9:*** *Professional Learning and Ethical Practice* |

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| ***develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.***<br>• Performances (a–c)<br>• Essential Knowledge (d–g)<br>• Critical Dispositions (h–k) | ***tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.***<br>• Performances (a–i)<br>• Essential Knowledge (j–n)<br>• Critical Dispositions (o–r) | ***to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.***<br>• Performances (a–i)<br>• Essential Knowledge (j–p)<br>• Critical Dispositions (q–v) | ***The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.***<br>• Performances (a–f)<br>• Essential Knowledge (g–k)<br>• Critical Dispositions (l–o) |

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| ***Standard #2:*** *Learning Differences*<br>***The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.***<br>• Performances (a–f)<br>• Essential Knowledge (g–k)<br>• Critical Dispositions (l–o) | ***Standard #5:*** *Application of Content*<br>***The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.***<br>• Performances (a–h)<br>• Essential Knowledge (i–p)<br>• Critical Dispositions (q–s) | ***Standard #7:*** *Planning for Instruction*<br>***The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.***<br>• Performances (a–f)<br>• Essential Knowledge (g–m)<br>• Critical Dispositions (n–q) | ***Standard #10:*** *Leadership and Collaboration*<br>***The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.***<br>• Performances (a–k)<br>• Essential Knowledge (l–o)<br>• Critical Dispositions (p–t) |
| ***Standard #3:*** *Learning Environments*<br>***The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self motivation.***<br>• Performances (a–h)<br>• Essential Knowledge (i–m)<br>• Critical Dispositions (n–r) | | ***Standard #8:*** *Instructional Strategies*<br>***The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.***<br>• Performances (a–1)<br>• Essential Knowledge (m–o)<br>• Critical Dispositions (p–s) | |
| **32 Indicators** | **37 Indicators** | **58 Indicators** | **35 Indicators** |

Annex 8: SR Vietnam (MoLISA) – Professional Standard Regulation for Vocational Lecturers, Teachers (short version)

| | | | |
|---|---|---|---|
| **CIRCULAR** No 30/2010/TT: **Professional Standard Regulation for vocational lecturers, teachers** (*September 29th, 2010)* | | | |
| **"Professional standard for vocational lecturers, teachers"** is the system of basic requirements on the quality political, ethics, lifestyle, and professional capacity that teachers, trainers should achieve to meet vocational training objectives. | | | |
| **Criteria 1** | **Criteria 2** | **Criteria 3** | **Criteria 4** |
| Political quality, professional ethics, lifestyle and behavior | Professional capacity | Professional pedagogy capacity | Professional development capacity, |

| | | | |
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| | | | scientific research ability |
| ***Standard 1:*** *Political quality*<br>***Indicator a) – d)***<br>*a) To strictly abide by the guidelines of the Party, policies and laws of the State;* | ***Standard 1:*** *Expertise*<br>***Indicator a) – d)***<br>*c) Knowledge of related subject;* | ***Standard 1:*** *Level of vocational training pedagogy, teaching time*<br>***Indicator a) – b)***<br>*b) Participate in teaching at least 1 year.* | ***Standard 1:*** *Exchanging experiences, learning, upgrading, training*<br>***Indicator a) – d)***<br>*- Regular self-study, retraining, practice to promote professional ethics, professional qualifications.* |
| ***Standard 2:*** *Professional ethics*<br>***Indicator a) – d)***<br>*b) Dedicated to the job; comply with rules, regulations of the vocational institutions, sector;* | ***Standard 2:*** *Professional skill*<br>***Indicator a) – d)***<br>*d) Understand technical safety, occupational health of the profession.* | ***Standard 2:*** *Preparation for teaching activities*<br>***Indicator a) – d)***<br>*b) Lesson plans are prepared in accordance with regulation, demonstrate teaching and learning activities;* | ***Standard 2:*** *Scientific research ability*<br>***Indicator a) –b)***<br>*- Basic knowledge and skills on scientific research and technology.* |
| ***Standard 3:*** *Life style and behavior*<br>***Indicator a) – c)***<br>*a) Ideally living, purpose, will of rise up, the spirit to strive continuously with clear motivation and creative thinking, performance of thrif, honesty and righteousness, public-mindedness following the morality mirror of Ho Chi Minh* | | ***Standard 3:*** *Implement teaching* ***activities***<br>***Indicator a) – d)***<br>*b) Implementation of theoretical teaching hours/practice/integrated, ensuring standard of knowledge, skill and attitudes as prescribed;* | |
| | | ***Standard 4:*** *Examine and evaluate learning outcomes of learners*<br>***Indicator a) – b)***<br>*a) To select and design tools to test and evaluate the learners' outcomes of knowledge, skills and attitudes consistent with the subject, module assigned to teach.* | |
| | | ***Standard 5:*** *Management of teaching records*<br>***Indicator a) – b)***<br>*b) Preservation, storage and use of teaching records following regulation.* | |
| | | ***Standard 6:*** *Construction program, compiling curricula, teaching materials*<br>***Indicator c) – d)***<br>*c) Understand the basis, principles, requirements and processes of program development of vocational training at college level.* | |

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| | | ***Standard 7:*** *Plan construction and implement educational activities* ***Indicator a) – d)*** *- Develop plan of education learner through teaching and other activities.* | |
| | | ***Standard 8:*** *Management of learner, development environmental education, learning* ***Indicator a) – b)*** *- Develop environmental education, learning healthily, convenient, democracy and cooperation.* | |
| | | ***Standard 9:*** *Social activities* ***Indicator a) – b)*** *- In coordination with learners' families and community to encourage, support and supervise the learning, training of learners; contributing to mobilize social resources to build, develop vocational training institutions.* | |
| **11 Indicators** | **8 Indicators** | **24 Indicators** | **6 Indicators** |

**9: SIREP – Teaching Competency Framework for SEAMEO Countries**

| | **General Areas of Responsibility / Competency** | Specific Tasks / Competencies | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **A** | **Facilitating the development of learners' life and career skills** | A.1 Equip oneself with knowledge, skills, attitudes and values of the 21st century *15.5, 15.6, 15.7* | A.2 Facilitate development of students' Learning to Know knowledge, skills, attitudes and values *10.5* | A.3 Facilitate development of students' Learning to Do knowledge, skills, attitudes and values *10.5* | A.4 Facilitate development of students' Learning to Be knowledge, skills, attitudes and values (e.g. emotional intelligence) *10.5* | A.5 Facilitate development of students' Learning to Live Together knowledge, skills, attitudes and values *10.5* | A.6 Assess students' knowledge, skills, values and attitudes on the 4 pillars of education *10.5* | | |
| B | **Facilitating learning** | B.1 Acquire mastery of subject | B.2 Employ strategies that | B.3 Communicate at learners' level | B.4 Promote students' participation and | B.5 Apply questioning and reacting | B.6 Integrate HOTS in the lesson | B.7 Contextualize teaching to local | B.8 Manage classroom |

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| | | matter *8.2* | cater to students' learning styles and to elicit active learning *8.6, 8.8* | *8.9* | collaboration *8.3* | skills *11., 11.2* | *8.6* | situations *8.5* | activities *7.* |
| C | **Preparing appropriate lesson plans in line with the school vision and mission** *16.2* | C.1 Assess existing learning needs *12.2* | C.2 Formulate specific learning objectives incorporating knowledge, skills, attitudes and values, if applicable *8.5* | C.3 Prepare lesson plan based on syllabus and time frame *8.5, 8.8, 8.9* | C.4 Consider diversity of learners in preparing lesson plans *8.9* | C.5 Select the right methodologies according to subjects and learners' level *8.5, 8.8, 8.9* | C.6 Determine appropriate learning resources available for teaching and learning | C.7 Construct appropriate assessment measures *13.2* | C.8 Utilize results of learner assessment and teacher's reflection in developing lesson plans *13.5, 13.6, 15.2, 15.3* |
| D | **Creating a conducive learning environment** | D.1 Foster a safe, clean and orderly learning environment *10.1* | D.2 Promote a caring and learning-friendly environment *10.1* | D.3 Motivate active learning *8.6* | D.4 Foster an understanding to maintain a high standard of learning performance *10.1* | D.5 Respect diversity of learners *4.3, 8.6, 12.2, 12.3* | D.6 Maintain a collaborative learning environment *8.3, 10.1* | | |
| E | **Developing and utilizing teaching and learning resources** ***10.6*** | E.1 Acquire knowledge and skills in the use of teaching and learning resources | E.2 Develop teaching and learning resources appropriate for the lesson | E.3 Utilize appropriate teaching and learning resources for the lesson | E.4 Integrate use of ICT in teaching and learning *8.10, 9.1, 9.2* | E.5 Monitor and evaluate the use of teaching and learning resources | | | |

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| F | **Developing higher order thinking skills (HOTS)** ***8.6*** | F.1 Equip oneself with HOTS concepts and strategies | F.2 Develop HOTS in learners | F.2.1 Develop creativity | F.2.2 Develop critical thinking skills *8.6* | F.2.3 Develop logical reasoning skills | F.2.4 Develop problem solving & decision - making skills | F.3 Strengthen HOTS in learners | F.4 Assess HOTS of learners |
| **G** | **Enhancing ethical and moral values** *1.4, 2.1, 2.2, 2.3., 3.2* | G.1 Internalize teachers' professional code of ethics as specified in one's country | G.2 Uphold and model teachers' professional code of ethics | G.3 Educate learners and co-teachers with ethics and moral values | | | | | |
| H | Assessing and evaluating learner performance *13.1 – 13.6* | H.1 Acquire knowledge and skills on testing, assessment and evaluation (e.g. authentic & portfolio assessment) | H.2 Develop formative and summative assessment tools | H.3 Assess students learning using different and appropriate assessment tools | H.4 Utilize assessment results | | | | |

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| I | **Engaging in professional development** | I.1 Conduct development needs analysis *15.2* | I.2 Prepare one's professional development plan | I.3 Engage in professional development *15.* | I.4 Reflect on the relevance of professional development undertaken *15.2* | I.5 Apply, share and disseminate new knowledge and skills gained from professional development activities, study visits and | I.6 Mentor/ coach novice / student teachers *15.4* | I.7 Assess the impact of professional development activities *15.2* | |

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| | | | | | | exchange programs *14.3, 15.6, 15.7* | | | |
| J | **Networking with stakeholders especially with parents** | J.1 Enhance public relation skills *7.1* | J.2 Develop partnership with parents and other stakeholders *7.3, 12.4* | J.3 Share the responsibility of educating students with the community *7.3* | J.4 Participate actively in socio-civic events of the community | | | | |
| K | **Managing students' welfare and other tasks** | K.1 Provide guidance and counseling support *12.4* | K.2 Develop counseling and disciplinary skills *7.1 – 7.7* | K.3 Organize and advocate social and extracurricular activities *16.6* | K.4 Attend to learners' emergency cases *6.3* | K.5 Perform administrative work *15.1* | | | |

Numbers in *italic type* under each Specific Task / Competency refer to the relevant indicator of the newly developed 'Standards for Vocational Teachers in Lao PDR'.