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SCHOOL-BASED IN-SERVICE TEACHER TRAINING IN MONTENEGRO

A HANDBOOK FOR POLICY MAKERS AND PRACTITIONERS

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SCHOOL-BASED IN-SERVICE TEACHER TRAINING IN MONTENEGRO
A HANDBOOK FOR POLICY MAKERS AND PRACTITIONERS

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INTRODUCTION

This handbook builds on experiences and materials from a three-year school-based teacher development project organised by the European Training Foundation (ETF) and the Centre for Vocational Education (hereafter 'VET Centre') in Montenegro.

The purpose of the publication is to capture and take forward the teaching and learning methodologies implemented in Montenegro and to produce guidelines for the organisation of similar competence development of teachers in other ETF partner countries. The ambition is to inspire and enable policy makers and practitioners to organise a school-based approach to the continuing professional development of teachers in vocational schools. Certainly the concepts can also be extended to those teachers who are delivering general subjects in upper secondary general schools.

The philosophy of this handbook is that the development of teacher competences will be more efficient and less expensive if closely related to the actual job requirements of teachers, organised for teams of teachers at school level with strong support from the school leadership. As macro-reforms in education have repeatedly been shown to fail, the present approach is based on a principle of 'small steps' requiring active support from external consultancy through instances such as national VET centres or pedagogical institutes. The aim of this publication is therefore to set the cornerstones for such school-based initiatives as an integral part of modern teacher education programmes.

The publication was drafted by a specialist team of authors consisting of external experts and ETF staff. In order to ensure quality and practical relevance, the drafting process was performed in close collaboration with key institutions in Montenegro (the VET Centre management and staff and the Bureau for Education Services), school principals and teacher trainers selected from nine Montenegrin secondary schools.

A viable alternative to traditional in-service teacher training can be provided through horizontal learning in school-based networks by implementing a framework for teacher development in the format of incremental steps. The ETF experience in Montenegro documented horizontal learning as a promising strategy for teacher competence development as long as adequate organisation and resources are provided at policy and practitioner levels. This handbook spells out the conceptual framework for a school-based teacher competence model, outlines new methodologies, defines national 'anchors', discusses key roles of policy makers and practitioners, and specifies the necessary resources, incentives and 'drivers' to sustain horizontal learning in schools. Besides providing recommendations for policy makers and practitioners, it also suggests how to organise professional development activities for teachers on the basis of modern pedagogical practices that promote the learning-to-learn competences of students.

This handbook presents solid approaches, methods and tools to support the facilitation of policy learning, but it does not aim to provide ready-made recipes to 'copy and paste' directly. The objective is not to provide a comprehensive and complete reference book to quote verbatim, but rather to offer reasonable and practical suggestions and advice on a range of related issues. It can be used as a practical consultation resource for policy makers, resource centres and schools, for self-learning and as a source of inspiration in the design and implementation of competence development programmes for teachers.

The tools and discussions presented in these pages are aimed at many types of VET stakeholder ranging from senior education authorities, through managers of teacher training organisations and school principals, to school-based teacher trainers and teachers. The document could also serve as a resource platform for ETF country managers, thereby contributing more widely to concrete implementation of the ETF-embedded concept of policy learning.

1. KEY CONCEPTS AND DEFINITIONS

1.1 TEACHER CONTINUING PROFESSIONAL DEVELOPMENT: WHAT IS IT? WHY IS IT IMPORTANT?

This handbook concerns the continuing professional development (CPD) of teachers within a school-based competence development approach.

There is wide consensus among researchers and practitioners that teachers are the most important factor in the quality of education in schools, and it is therefore clear that supporting the professional development of teachers makes a key contribution toward improving educational systems and the learning outcomes of students.

The professional development of teachers is a lifelong, career-wide process that starts at university and ends at retirement. Teachers have an ongoing commitment to maintain their professional expertise and they must recognise themselves as learners involved in the continual revision and enhancement of their knowledge and skills, and their teaching and learning approaches. To achieve this, they must engage in an appropriately balanced range of personal and professional development activities, enabling them to progress and learn in ways relevant to their individual needs and those of their students throughout their careers.

This lifelong professional development falls into a number of general stages, each with its own specific requirements. The first phase consists of teacher preparation in initial teacher education courses within higher education institutions, providing the basic knowledge and skills (the so-called 'pre-service teacher education') for those wishing to become teachers. The second stage covers their first independent steps as teachers in the classrooms and is generally known as the 'induction phase'. Finally, the third phase consists of CPD for those professionals who have overcome the initial teaching challenges and have chosen to make a career of teaching in schools, also known as 'in-service training'.

All teachers will go through the same three phases in their careers. However, the quality of development achieved will depend strongly on the support provided to them in each of those stages. This handbook places special emphasis on the importance of establishing supportive learning environments in schools, creating a culture of enquiry and reflection that enables teachers to take responsibility for developing their own learning in the classroom.

1.2 LEARNING AND LEARNING ENVIRONMENTS

ACTION LEARNING

In 1940, Reginald Revans developed a theory that managers experiencing problems within their organisation could benefit from communicating with each other and actively implementing the suggestions generated.

In his encounters with a talented group of scientists as a physicist at the University of Cambridge Revans noted the importance of each scientist describing their own ignorance, sharing experiences, and reflecting communally in order to learn. He used these experiences to further develop the method in the 1940s while working for the Coal Board in the United Kingdom. Here, he encouraged managers to meet together in small groups, to share their experiences and ask each other questions about what they saw and heard. The approach increased productivity by over 30%. Later, Revans came up with a formula to describe the process:

$$L = P + Q$$

where L is learning, P is programming and Q is questioning to create insight into what people see, hear or feel.

This formula was later adapted by Marquardt et al. (2009) to read:

$$L = P + Q + R$$

where R refers to reflection: an additional element emphasizing the point that 'great questions' should evoke thoughtful reflections in consideration of the current problem, the desired goal, the design of strategies, development of action or implementation plans, or execution of action steps.

The basic principle discovered by Revans was that groups of people working together to solve problems are highly productive in finding inspiration and directions of approach to difficult problems, and he named this process 'action learning' which he defined as follows: 'Action learning is a means of development, intellectual, emotional or physical that requires its subjects, through responsible involvement in some real, complex and stressful problem, to achieve intended change to improve their observable behaviour henceforth in the problem field' (Revans, 1982, pp. 626–27). Although he was the first to coin the term action learning, many earlier sources had already made reference to the important role of practice in learning, with related quotations dating as far back as Confucius: 'I hear and I forget; I see and I remember; I do and I understand.'

The generally accepted current definition of action learning is that of a process in which people work and learn together by tackling real issues and reflecting on their actions in a way that allows learners to acquire knowledge through real actions and practice, rather than through traditional instruction. The process works best when people work together in small groups. This approach is particularly suitable for adults as it enables each person to reflect on and review the action they have taken and any learning points arising in a way that can be used to guide future action and improve performance (Revans, 1982).

The main principle of action learning (to do something that is important, to improve it by working with it, and to learn from it at the same time) has attracted the attention of education policy makers and school leaders. Action learning provides schools with value for money, and teachers have found that the opportunities for reflection and learning make the whole process of changing and improving practice more exciting. The action learning approach to CPD implies that competence development and improvement of teacher practice must take place in the workplace, i.e. be school-based. Professional development essentially means competence development for teachers, where competence is understood as the ability and willingness to do things in practice. Practice must be part of the competence development process in order to adequately train up in this competence and assess whether it is actually implemented.

HORIZONTAL LEARNING AND COMMUNITIES OF PRACTICE

'Learning', in the traditional sense, is seen as the transfer of knowledge from 'expert' to 'learner' in a top-down knowledge process commonly known as a 'vertical exchange'. 'Horizontal' learning practices, conversely, are exchanges of knowledge between or amongst peers with the same fields of interest, all of whom have some experience or expertise in the area, and all of whom are considered experts despite some variance in the degree and area of their expertise. Horizontal learning, as mentioned in sources such as Stielau (2007), assumes a broader approach than vertical learning, addressing a cross-section of knowledge and blending information from different fields to achieve new levels of understanding.

Horizontal learning, therefore, appears to offer an effective and efficient framework for learning together that is most useful when applied in an appropriate learning environment. Any problematic situation can provide a good starting point for a learning environment – 'learning begins with ambiguous situations that present a dilemma, problem, or felt difficulty for the individual' (Dewey in Smylie, 1995).

Thus, horizontal learning involves: (i) getting impulses from the outside world, from experts or colleagues; (ii) acquiring experience by doing something; and/ or (iii) learning from others on the basis of shared learning. When the learners in such a situation are teachers, there is a great deal of knowledge available for sharing in a manner that can be far more productive and cost effective than buying in an external trainer. When horizontal learning leads to cooperation between different groups of staff, a 'professional learning community' (Hord and Rutherford, 1998) is created, and the best of these contain:

- a principal who shares leadership, power and authority and who participates collegially by encouraging staff involvement in decision making;
- a shared vision developed from an unswerving staff commitment to student learning that is consistently articulated and referenced in all work undertaken by the staff;
- opportunities for teacher-to-teacher collaboration and observation accompanied by feedback and assistance as needed;
- opportunities for staff reflection, collective inquiry and sharing of personal practice;
- the sharing of success stories and celebration of achievements.

When applied to CPD for teachers, two different kinds of horizontal learning networks can come into play, both of which have useful applications in our context:

- trainer networks across education institutions (schools, training centres etc.);
- teacher networks (learning environment) within institutions.

This handbook is therefore based on the concept of horizontal learning or learning in networks. The idea behind the 'learning network' is that people with almost the same professional background who face similar challenges can learn a lot together and from each other through the concept of horizontal learning – meaning that directors, trainers and teachers are all expected to learn and improve their competences.

The key elements of the approach are:

- a learning network consisting of selected trainers and teachers;
- horizontal learning;
- use of action learning;
- sharing and developing knowledge together – face-to-face, as well as electronically;
- functioning as a community of practice (CoP).

A learning network[1] operating on the basis of horizontal learning, where people from similar professional backgrounds (such as training) share and develop experience and knowledge, could also be called a community of practice (Wenger et al., 2002).

The term 'communities of practice' was first coined by Etienne Wenger and Jean Lave in 1991, but, although the central tenet of the term has always rested upon the commonality of practices in both their explicit and tacit dimensions, the concept has since been developed; fleshing out the theoretical and philosophical basis for this form of social learning.

'What is shared by a community of practice – what makes it a community – is its practice. [...] Such a concept of practice includes both the explicit and the tacit. It includes what is said and what is left unsaid; what is represented and what is assumed. […] But it also includes all the implicit relations, the tacit conventions, the subtle cues, the untold rules of thumb, the recognisable intuitions, the specific perceptions, the well-tuned sensitivities, the embodied understandings, the underlying assumptions, the shared worldviews, which may never be articulated, though they are unmistakable signs of membership in communities of practice […].' (Wenger, 1998, p. 47)

In essence, CoPs are groups of people linked by exposure to common problems and the common pursuit of solutions, whereby they embody a store of knowledge within the constituent members. They share similar goals and interests, which they pursue through the employment of common practices, working with similar tools and expressing themselves in a common language. Through common activities, they come to hold similar beliefs and values.

A more recent definition given by Wenger (2006) describes CoPs as 'groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly', before going on to clarify that the term is simply a relatively new name for an age-old concept. The commitment to learning demonstrated by CoPs is a commonly recognised feature that Pór (2001) described: more than a 'community of learners', a community of practice is also a 'community that learns'. Not merely peers exchanging ideas around the water cooler, sharing and benefitting from each other's expertise, but colleagues committed to jointly develop better practices.

The theories discussed above – action learning, horizontal learning and learning in CoPs – provide a strong foundation for an exploration of CPD for teachers through school-based competence development in horizontal learning approaches within structures similar to CoPs.

For teachers in particular, learning and practice are like two sides of the same coin where, in the words of Wenger (1998, p. 96): 'Learning is the engine of practice, and practice is the history of that learning.' Ideally, improvement of practice must take place in the workplace with competence development forming part of a continuous learning process within the organisational environment. In short, each activity that is undertaken will then lead to experience and, if an

opportunity is given for reflection on the experience, better knowledge is acquired along with the ability to do better the next time. For teachers in particular, organising CPD through CoPs will mean:

- *learning from doing* (rather than formal training or instruction) which is more appealing to adults, exciting for teachers and cost-effective for schools;
- *peer learning* or learning from peer practice through evaluation of experiences and in-depth reflection on these;
- *systematic reflection and learning* through the establishment of a community of practice, i.e. a permanent membership group committed to the resolution of common problems;
- *exchange of and learning from both the explicit and tacit aspects of teacher practice* through the CoP mode of learning (as traditional instruction focuses mainly on its explicit dimensions);
- *generation of new knowledge and improved practice* within the 'community that learns' (Pór, 2001), i.e. stimulating learning for individual learners and the CoP as a whole.

This handbook provides some suggestions on how practice and learning can be brought together to enhance teacher competences and professional development. The following chapters present the main building blocks and success factors for just such a process as encountered during a recent three-year school-based teacher development project organised by the ETF and the VET Centre in Montenegro.

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1   A term inspired by the ETF LEARN project.

2. GENERAL APPROACH AND GUIDING PRINCIPLES

The contextual settings of vocational schools (such as school leadership, school culture, and teacher attitudes, beliefs and concerns) influence policy implementation and can change agendas. Modern vocational schools are highly complex organisations with many interests and purposes; for while they transmit competences, cultures and norms, they also provide professional qualifications for young people and adults to access occupations and the financial and social status that comes with it.

Vocational schools in Montenegro are undergoing transformation processes whilst also feeling the impact of economic and global changes; a combination that has resulted in a decline in enrolment over recent years. Dealing with these challenges is further complicated by the commonly-held public perceptions that educational standards are deteriorating, that vocational schools provide poor value for money, that they are struggling to develop new programmes and the types of courses needed by the local economic community, and that they find it difficult to cope in the competitive environment encouraged among providers by the central authorities. This places enormous pressure on vocational schools in meeting their responsibilities to deal with these challenges and ensure quality of performance, with most of the stress being borne by teachers and school leadership teams.

At the same time, there is great untapped potential in schools that could be leveraged through the implementation of local development strategies.

Vocational schools in Montenegro primarily operate in the public sector, receiving government subsidies on a student-to-teacher ratio basis, within an institutional environment where there is little management autonomy or capacity to generate alternative forms of revenue, coupled with restricted opportunities to develop innovative training. By and large, they focus on delivering upper secondary VET, mostly based on a renewed curriculum implemented following a reform process from 2004. Teachers are constantly asked to find new practical solutions and to act as facilitators in the ongoing changes to the pedagogical environment and process. There is increased pressure on professionals in vocational schools to come up with new teacher development concepts capable of fostering new ideas and developing new opportunities for teachers and vocational schools alike.

A move away from classic pedagogical jargon towards new CPD concepts for teachers will greatly help vocational schools to improve their performance. The professional knowledge of teachers is often tacit and needs to be 'teased out'. Most partner countries have limited experience with bottom-up approaches, most of which have come from donor-led pilot projects where the normal procedure is for teachers to be given precise instructions within a project structure laden with short deadlines and embedded in externally defined objectives.

This chapter presents the fundamental organisational and pedagogical building blocks for use in school-based in-service teacher competence development.

2.1 THE 'SMALL STEPS' METHOD

School-based teacher training can be approached through the 'small steps' strategy; a process specifically designed to achieve gradual change built on the premise that good results can be achieved by making continual small steps in the right direction. The gradual nature of this approach ensures that all of the changes achieved are adapted to the current conditions in the daily work of the individuals involved. This improvement model asks three fundamental questions which can be addressed in any order: What are we trying to accomplish? How will we know that a change is an improvement? What changes can we make that will result in improvement?

This process for change appears to offer an inexpensive way to enhance teacher competences. However, the method requires a high level of commitment and continuity to achieve its best results, demanding a great deal of time input particularly in the introductory phase, along with the support of an engaged, change-oriented and creative school leadership. External consultancy support, based on relevant experiences, is also absolutely essential during the process.

The method operates on the simple principle of an over-arching goal of pedagogical improvement where project participants continuously define relatively small goals that can be achieved within a couple of weeks. The success of the process is highly dependent upon

the right people becoming involved in the process improvement team, with each school building the team best suited to their own needs, free of any constraints on the size and composition of the group.

The process operates in four stages – formulation, implementation, comparison and action – which can later be repeated to form a spiral of improvement.

1. After asking: What do we actually want to accomplish in our own school?, the school team formulates a plan for the coming period on the basis of the following two questions: What do we want to do? Who is doing what and when?
2. They then implement the planned element of change into their teaching, documenting details in the form of: What did we do? What happened?
3. After each pilot experience is completed the team makes a comparison, asking: Did we accomplish what we wanted? Why/Why not? What can we learn from this?
4. Finally, the groups act on the lessons learned, moving on to the next element of the local project: What do we think we should introduce next?

The cycle of change is then repeated again and again to stimulate improvement in a continuous, structured process of setting aims, establishing measures or activities, selecting concrete elements of change, implementing improvements and spreading changes in the school.

This particular method of change is very useful because it emphasises the concrete and practical implementation of intended but small changes, and it highlights continuing learning on the possibilities for achieving goals and the types of limitations that may be in place. When experiences are captured in

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BOX 2.1 REFLECTION AND INQUIRY

What are we trying to accomplish? – *Setting aims*

Improvements require the setting of aims. The aim should be time-specific and measurable. The aim should also define the specific population of students, the involvement required of other colleagues and list any other systems that will be affected.

How will we know that a change is an improvement? – *Establishing measures*

Project participants use quantitative or qualitative measures to determine whether a specific change actually leads to an improvement.

What changes can we make that will result in improvement? – *Selecting changes*

Ideas for change may come from the insights of those who work in the school, from change concepts or other creative thinking, or from borrowing the experience of others who have successfully improved teaching and learning practices.

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a systematic manner like this, it becomes easier to describe the change process and its internal dynamics.

Our experience in the school-based project in Montenegro showed that colleague-to-colleague dissemination was

possible, that it is effective, inspiring, and pedagogically highly relevant. Having said this, the approach functions best once the right conditions are put into place, and an organised and well-planned project strategy is necessary for optimum performance. The gradual changes of the 'small steps' method add value to the rich seam of teacher creativity already present, capturing the potential learning impact and building the job satisfaction of school employees. It has already been confirmed that helpful ideas and examples of good practice are more effectively spread via teacher-to-teacher sharing of activities in real working contexts (horizontal learning) than through top-down dissemination.

2.2 THE CORE PRINCIPLE

This approach to school-based in-service teacher training stands on the assumption that peer-to-peer learning and knowledge sharing in networks with other schools are optimal ways to facilitate learning that offer many benefits. However, similar experiences in many other countries also suggest that it is almost impossible to take examples of good practice from one organisation and simply transplant these onto another without due consideration of important elements such as: conditions, ambitions, culture, tradition and competence, all of which will vary from one organisation to another.

In the project in Montenegro, participants worked with a number of good examples of practice at each of the participating schools. Rather than trying to implement the example as it stands, they were asked to analyse it in order to identify the core of the example, using what could be called the 'core principle'.

Once this process was complete, only the core of the good example was carried over from school 1 to school 2. In school 2, the core was then applied as a basic element that must be present, while the related process and activities were changed to fit with the ambitions, competence, culture and tradition of school 2, leading to the construction of a new concept (see **FIGURE 2.1**).

The project experience supported schools in developing their capacity for horizontal learning principles, helping them also to ensure that all new projects relate to the overall strategy of the school. The use of the core principle approach offers promising potential for knowledge sharing, and horizontal learning also offers a number of advantages.

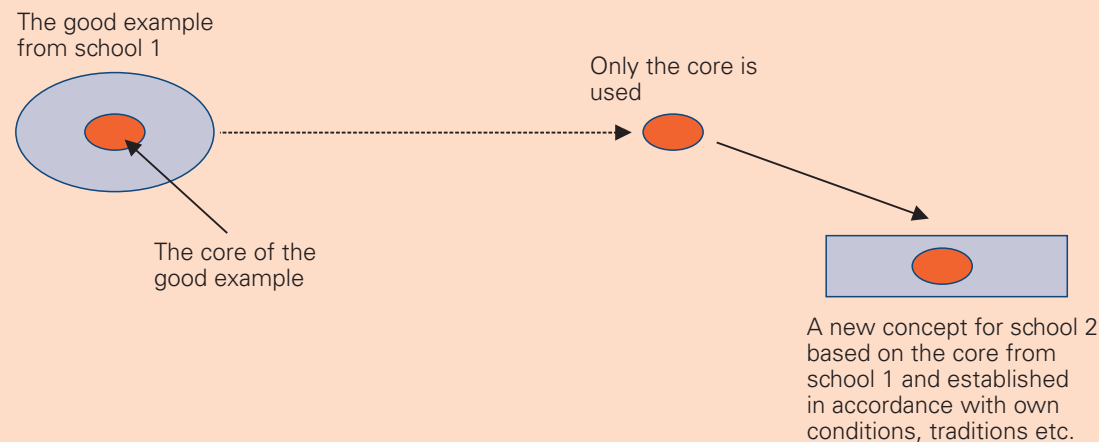## 2.3 LEARNING FROM EACH OTHER IN COMMUNITIES OF PRACTICE

Teachers work in schools where they must organise teaching and learning in accordance with national goals and frameworks, normally working alone in classrooms and workshops following the patterns established by the traditional division of workload in schools. Most teachers come into schools from various academic institutions where they have been trained to teach their subject on the basis of theoretical psychology, pedagogy and didactics. However, once they are actively teaching in public school classrooms they meet

a number of new challenges for which they may not be adequately prepared. The first of these is undoubtedly accountability, as social norms demand that schools and teachers develop the 'good citizen' in each student; one who will comply with the norms of society, seek further advancement on the education ladder, and ensure that they have the 'right skills for the jobs available', and so on. This exerts enormous pressure on schools and teachers, and is one obvious reason why CPD for teachers is such a crucial issue. The CPD methodology in the Montenegro project builds on the assumption that a form of applied pedagogy is missing from the landscape of learning in ETF partner countries, and that the starting point for addressing this lies in the daily work of teachers.

Many of the partner countries depend on the traditional form of centralised continuing training courses for teachers. These are organised as part of the national teacher education system in programmes designed by universities and other external experts, typically offered through a national 'catalogue' for continuing teacher training provided in the form of short courses. This model is useful in the professionalisation of teachers, but has a number of serious limitations: it only allows for a very small number of teachers to participate; it individualises competence development; it has a limited impact; it frequently provides no answers to pressing challenges in daily teaching; and it is very costly.

Current trends and discourse in the professional development of teachers show a tendency away from classical approaches such as in-service teacher training and the dissemination of best practices, and both schools and teachers have shown an interest in experiencing other types of continuous competence development.

FIGURE 2.1 THE CORE PRINCIPLE

The good example from school 1

The core of the good example

Only the core is used

A new concept for school 2 based on the core from school 1 and established in accordance with own conditions, traditions etc.

Experience shows that teachers can learn a lot together and from each other in contexts where the production of new knowledge helps teachers to achieve personal experiences in pedagogical development work, building upon the vast bank of latent know-how within teams of teachers in schools. The existing teacher competences can be tapped into through development projects within a supported network design in a 'learning-by-doing' process, offering an attractive alternative to the traditional approaches. Many schools already have the motivation and are just lacking the stimulus they need to get started. Almost all schools want: (i) to develop teaching and the skills of teachers; (ii) to capture and develop relevant knowledge in VET; (iii) to have local development work as an integral part of school work and the annual school development plan; and (iv) to strengthen and get added value out of network relations.

The crucial issue is therefore how best to develop the role of teachers as learners and teachers.

A lot of 'tacit' knowledge can be 'teased out' from the practical know-how of teachers through more systematic approaches to project work. This can be delivered through the appealing and organic approach of CoPs that apply careful planning and management strategies in order for the members to extract the full benefit of learning from each other. Researchers have outlined four key challenges in starting and supporting communities capable of sharing tacit knowledge and thinking together (McDermott, 2001):

- the *management challenge* – to communicate and demonstrate that the organisation (the school, but also the national education system in general) truly values sharing knowledge;
- the *community challenge* – to create real value for community members and ensure that the community shares cutting-edge thinking, rather than sophisticated copying;

- the *technical challenge* – to design human and information systems that not only make information available but help community members think together;
- the *personal challenge* – to be open to the ideas of others and maintain a thirst for developing the community's practice.

These four challenges break down into ten main factors central to success for such communities, and McDermott (2001) suggests ways to address each of these:

Management challenge

1. focus on topics important to the practice and community members;
2. find a well-respected community member to coordinate the community;
3. make sure people have time and encouragement to participate;
4. build on the core values of the organisation;

Community challenge

5. get key thought leaders involved;
6. build personal relationships among community members;
7. develop an active passionate core group;
8. create forums for thinking together as well as systems for sharing information;

Technical challenge

9. make it easy to contribute and access the community's knowledge and practices;

Personal challenge

10. create real dialogue about cutting-edge issues.

2.4 PRINCIPLES OF PROJECT-ORGANISED TRAINING

Project-organised training has also been widely used in recent years in education settings; in the classroom and in more traditional in-service teacher training. The main principles of the project method are:

- problem orientation,
- participant-centred,
- interdisciplinary coherence,
- theory–practice relations.

PROBLEM ORIENTATION AND PARTICIPANT-CENTRED APPROACH

Problem orientation operates on the basis that a project takes a definite problem as its starting point. Ideally, this should be a problem which each individual participant could easily formulate for themselves, as this will ensure participant interest in the process and will form the basis for considerable change in participant competences. Problem orientation is also used to ensure that participants get used to asking questions as well as answering them, and that they get experience in working out the answers to the questions, or solving the problems, for themselves.

The problem orientation approach ensures that teachers become engaged in defining practical tasks that form part of their every-day school environment. The participant-centred approach is a logical consequence of problem orientation, at least insofar as participant influence is concerned. The key issue here is that the problems are defined by the same individuals responsible for finding the solutions, meaning that they must manage the situation themselves. (*Project-organised training*, undated.)

2.5 PRINCIPLES OF ACTION LEARNING

The principles of action learning are basically that learning must be tied in with a real, concrete project. Such training will often be organised as a development project for a number of participants who may either work closely together or on their own in their normal classrooms depending on the demands of the task in hand.

The central learning unit will in most cases be the working group (4–5 persons). Every participant will be asked to attend with a problem or project already formulated from a given department and preferably from within their own classes. The working group will meet regularly to provide support or criticism and to form the basis for the exchange of experiences, while some guidance will also be provided by an expert or trainer attached to the group. The learning process will be organised on the basis of the following assumptions.

- The starting point must be in dealing with everyday tasks. These must be approached in such a way that seeking the solution to the problem will in itself become a learning process.
- The participant must take a personal risk in handling the problem (the person presenting the problem must have a vested interest in its resolution).
- Participants learn best by working with real and specific problems, becoming aware of their own progress and the factors influencing this as they work through the problem.
- More behavioural change is achieved as a result of reinterpretation of previous experience than through the acquisition of new knowledge.
- Reinterpretation occurs best through the exchange of ideas and opinions with other participants in the same situation.

- An evaluation of the results achieved must be given every time the group meets.
- Every participant must be given an assignment deeply rooted in reality, but the assignment must be relatively complex and unstructured (no definite approach to the problem must be given beforehand).

Learning is a social process supported by mutual encouragement. The project is the central activity in such a training programme.

REQUIREMENTS IN AN ACTION LEARNING PROJECT

Not all actions promote development or learning. Some activities occur simply because they have to be completed and individuals are capable of doing them. Some types of purely routine work require little thought and little human relation; they teach us nothing and are not suitable for learning.

For a project to be productive and as good as is possible, the activities involved must therefore be considered carefully.

1. The project must be rooted in reality and the project host must be interested in resolving the problem.
2. The participants must take on reasonable levels of responsibility and risk in order to really feel obliged to work seriously with the project.
3. There must be real possibilities for action on offer and it therefore follows that resources for action must be made available.

The selected problem must be complex and appear real and relevant to the participants. The task must be open, have no set answer and be relevant for the future, action-oriented and capable of being solved by several individuals working together. Overall, it must

entail a realistic level of responsibility and be beneficial to others.

Organisations working with action learning have reported good experiences with such learning programmes, although not all of the activities are equally good. Developments in action learning projects take place through suitable specific activities such as work tasks, participation in conferences, courses, formal education programmes, self-tuition, study visits, conversations with others and visits to other countries. All of the activities undertaken must entail the potential for development, allowing participants to learn something and expand their capacity. The training and development achieved can be purely personal or in line with the broader interests of the school.

In school-based development, however, we deal exclusively with work tasks that are in the interests of the school and the individual at the same time. The most important element in making this connection is the identification of activities which have the necessary potential for development. Once these have been found, participants must be involved in such a way that they find the training activities appropriate, exciting, relevant, and fitting to their future development if an efficient training process is to be obtained.

3. KEY ACTORS IN SCHOOL-BASED TEACHER PROFESSIONAL DEVELOPMENT

This chapter moves on from the general approach and guiding principles of the previous sections to focus on the practical steps in establishing a school-based CoP for the continued competence development of teachers, highlighting the key actors in the process.
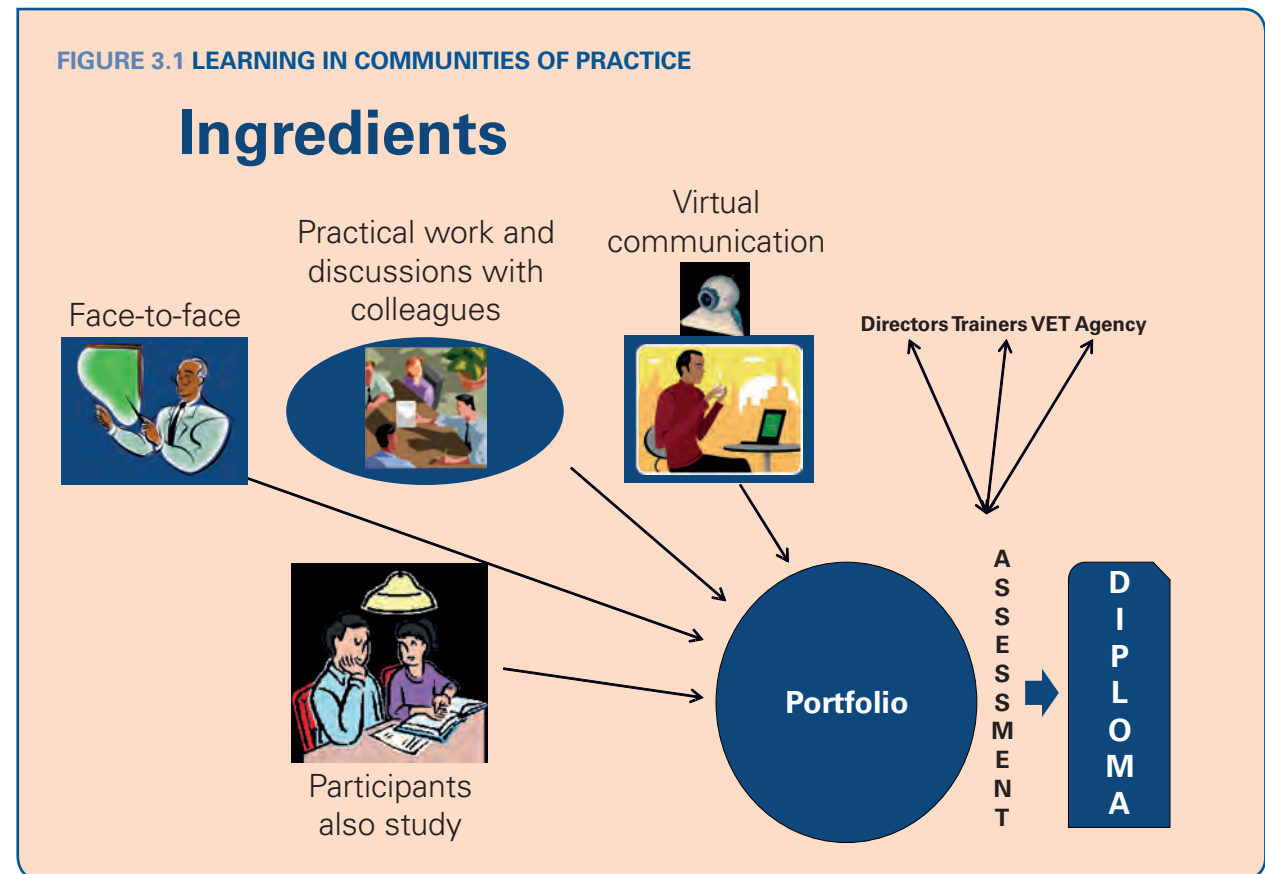
The handbook approach builds on competence, learning, action learning and horizontal learning to promote the sustainable professional development of teachers. Prerequisites for launching the process include:

- an absence of legal or administrative barriers to school-level professional development of teachers;
- support for school-based CPD from the relevant national authorities, as well as school leaders;
- motivated and willing teachers ready to take part in school-based CoPs;
- interesting and appealing topics, problems, and practices identified as common challenges deserving of cooperative thinking and joint action;
- facilitation of school-based CPD by well qualified trainers, ideally local experts rather than international consultants.

The key actors in school-based competence development are the teachers, trainers and school principals. In the model illustrated in **FIGURE 3.1**, the participants (teachers) receive information from experts, peers and individual studies from outside the school via face-to-face or virtual means. The results are gathered in a portfolio that contains the proven competence and improved practice of the participants, and these can then be assessed by a peer reviewer team made up

of teachers as peers, the school director, the trainer, and the central authorities (Ministry of Education or

VET Agency). Finally, a certificate or diploma can be issued once the assessment is complete.

FIGURE 3.1 LEARNING IN COMMUNITIES OF PRACTICE

Ingredients

Face-to-face

Practical work and discussions with colleagues

Virtual communication

Participants also study

Portfolio

Directors Trainers VET Agency

ASSESSMENT

DIPLOMA

It is important to note that school-based competence development is most effective when it responds to a particular need or change. All organisations, including schools and national education systems, tend to be in some kind of balance until a planned or unplanned change occurs, prompting the implementation of something new. In most cases, the novelty will disturb the existing balance between the various organisational elements. Advances in school-based competence development are generally stimulated during or following periods of disruption, regardless of whether the precipitating event is regarded as positive or negative. Such disruption stimulates a period of stocktaking arising from such areas as:

■ policy and politics (not least government decisions, new legislation etc.),
■ structure (reform processes etc.),
■ context (expectations of different stakeholders),
■ school leadership (visions, management styles, power etc.),
■ school culture (shared beliefs and values),
■ teacher learning (the environment established for the competence development of teachers),
■ teachers (experience, private lives etc.).

Each of those elements, and the relationship between them, could be challenged by the implementation of a new concept for competence development, and the organisation will reach a new and changed form of balance following implementation. Major changes are likely to generate greater resistance and more conflict, and they may not actually be the best solution in many cases. This handbook therefore suggests that readers should 'think big' but 'start small' – understanding that change is neither a linear nor a logically graduated process – being sure to clearly formulate the thematic field for competence development to be covered by the CoP from the outset. In Montenegro, for example, the national authorities had identified the promotion

of key competences for lifelong learning (as defined in European Parliament and Council, 2006), and the 'learning-to-learn' key competence in particular, as a major gap in VET teacher competences, making this the central topic for the entire school-based CPD model.

3.1 THE TRAINER

One of the main actors in the school-based CPD model is the trainer. The trainer is a qualified teacher who has taken part in projects and training in the past, and who has been certified as a trainer by the national authorities.

In some cases, when the topic of competence development is new or unfamiliar to teachers, the trainer – in cooperation with the school director – will need to organise an initial round of traditional formal training for future participants in the CoP. The trainer will conduct this training, bridging the essential knowledge gaps and preparing teachers for horizontal learning. Within the Montenegrin project, this initial training answered questions such as:

■ Why are key competences, in a lifelong learning perspective, so important?
■ What should teachers do in order to improve key competences of students? (Presentation and further discussion of tools, methods and exercises with colleagues participating in the training.)
■ How can participants learn from each other (horizontal learning) and how can experience and knowledge be shared among participants?
■ How can teachers improve their own practice (in relation to a specific key competence), and learn from it at the same time?
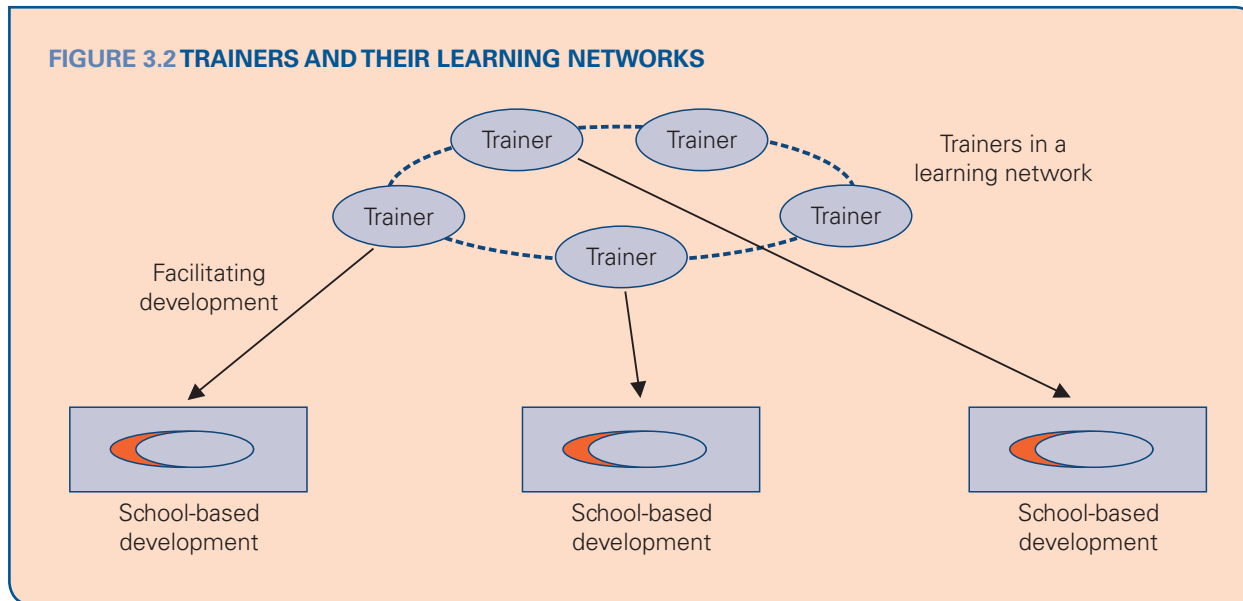
■ How can examples of good practice from the school be documented and shared with other schools in Montenegro?

Where the school-based competence development involves more than one school, then the trainer also networks with the other certified trainers from the rest of the participating schools (a CoP for trainers), as illustrated in **FIGURE 3.2**. Thus, the trainer is involved in two CoPs – one for trainers and the other one in the school of origin – with the sole objective of promoting and facilitating competence development among teaching colleagues in the school. Trainers are therefore expected to contribute their ideas, concepts and good practice, ensuring that all the best results are adequately shared and that results and ideas are made available to the other trainers.

3.2 THE TEACHER

The most important professional and stakeholder in the school-based strategy is undoubtedly the teacher. Teachers are expected to formulate their own practice projects, to get experience from these and to share their experiences with colleagues and the trainer. They are encouraged to work as a horizontal learning group (a local CoP), teaching each other and learning from each other at the same time and using the trainer and other facilities as tools for learning. They are also expected to systematically share the knowledge and skills acquired with colleagues (with some support from the trainer) and to describe good examples in a way suited to publication by the trainer on the project website.

Practice and the improvement of practice is a cornerstone of professional development for teachers

FIGURE 3.2 TRAINERS AND THEIR LEARNING NETWORKS

3.4 EDUCATION AUTHORITIES

The national ministries of education and other relevant institutions (VET agencies, education inspectorates etc.) are indispensable actors, in a back-up position. They can provide financial support and approve and certify trainers; they have the experience and staff to further support professional development projects and they may be able to attract funding from different sources. They are also responsible for rolling out good practices and for ensuring their sustainability.

FIGURE 3.3 clearly places the institutions in the position of the anchor and driver of this school-based model, in a position where they must reach agreements with schools about the expected and preferred professional development of teachers in the sector. It is also important for agencies to have good links and cooperation with the respective schools, so that they can establish school networks when needed and make use of the trained and certified trainers.

at the school level. Project-organised work provides one of the best tools for engaging in new forms of practice, and project-organised learning helps make this transparent and accessible for observation, discussion and feedback from the CoP members. To ensure the best results, the teacher must formulate and implement a project in accordance with the common regulations and in agreement with the school director, the trainer, and other CoP members.
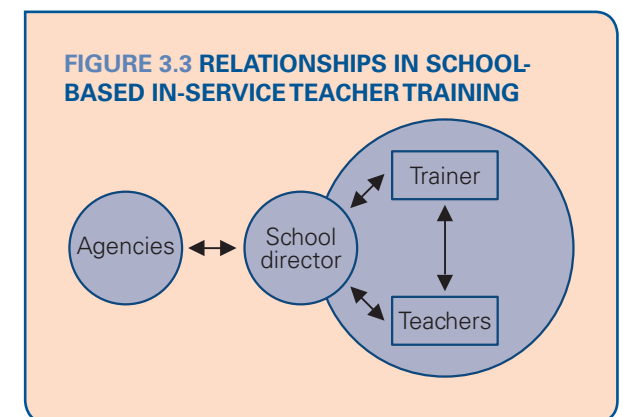
3.3 THE SCHOOL PRINCIPAL

It is essential that the school principal be actively involved in the professional development of the remaining school staff. The principal or director may

already have ideas as to what should be improved and how much money and other resources should be spent on this. The principal will also have closer relations with the education authorities, he or she will therefore become aware of new reforms and expectations ahead of the rest of the staff, and will always have contact with local stakeholders (companies, parents and politicians among others) who may have an important role to play in providing students with a specific key competence. The school director must agree the content and form of the training programme with the trainer and also decide who should participate and under which conditions. All this makes the school director a very important player; for while not directly involved in the training and CoP as such, he or she will play a key role in developing a supportive school culture and deciding on the framework for school-based development.

FIGURE 3.3 RELATIONSHIPS IN SCHOOL-BASED IN-SERVICE TEACHER TRAINING

The entire competence development process takes place in the field of practice, and it is therefore in actual practice that improvements will occur and where learning will be provided to participants. Hence the context is of critical importance. Both school directors and teachers would like to improve their own practice, and learning from that is an added dimension of this professional development approach. The improvement of practice is a common project for all participants; examples of good practice should be shared among participants and ultimately be made available to all teachers.

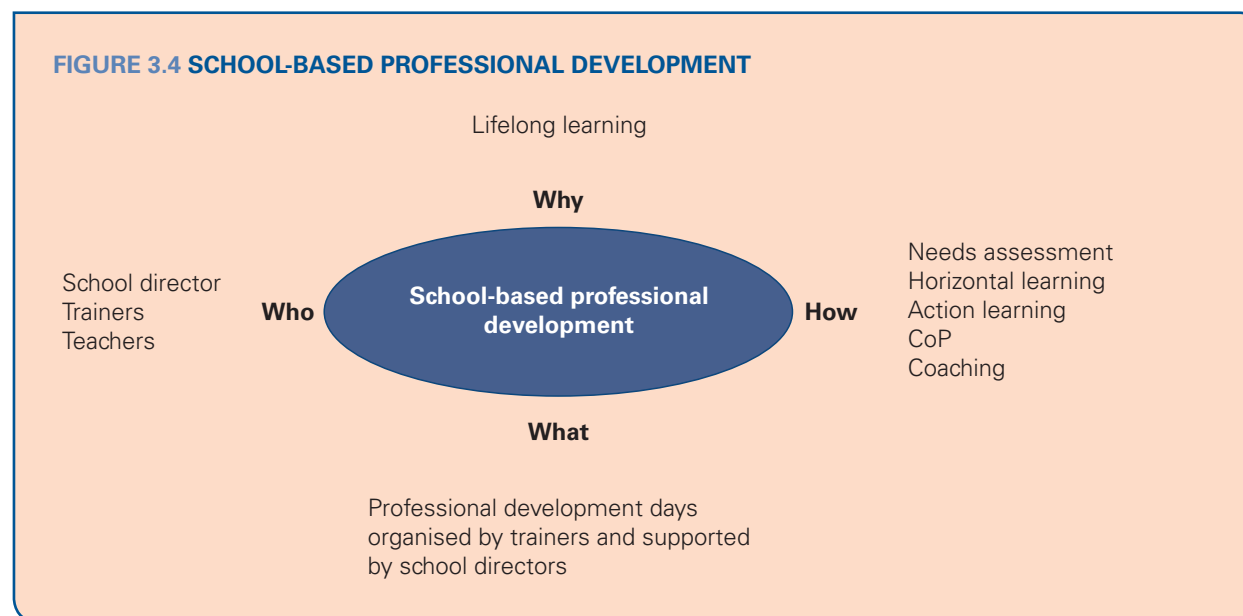Knowledge sharing, on the other hand, is not so easy to achieve.

- Those with knowledge can only share the content they are aware that they possess.
- They share only what they believe others would like to hear and not what they think the others already know.
- Those with a need for more knowledge must ask questions in order to obtain the information they need and want to know.
- They must be given opportunities to watch other colleagues work, allowing them to interpret for themselves why the good practice takes place – gaining ideas on the tacit know-how that frequently

underlies good practice – even where teachers are not explicit about this.

Trainers must ensure that systematic knowledge-sharing activities occur, that these are organised in cooperation with school directors and that all the

teachers are involved. Examples of good practice could be shared with all colleagues in the country.

FIGURE 3.4 provides a visual overview of the proposed model for the school-based professional development of teachers.

FIGURE 3.4 SCHOOL-BASED PROFESSIONAL DEVELOPMENT

Lifelong learning

Why

School director
Trainers
Teachers

Who

School-based professional development

How

Needs assessment
Horizontal learning
Action learning
CoP
Coaching

What

Professional development days organised by trainers and supported by school directors

4. TEACHER CONTINUING PROFESSIONAL DEVELOPMENT IN SCHOOL-BASED COMMUNITIES OF PRACTICE: THE PROCESS IN MONTENEGRO

Against a backdrop of demands for increasing flexibility, mobility and multi-tasking from workers in the workplace, the European Union policy drive to promote key competences in education reflects a growing interest from enterprises in engaging and retaining employees with a broad package of generic competences applicable to all workplaces. The Montenegrin 2017 Discussion Paper on human resources development places particular emphasis on the need for key competences in the bid to ensure that the country's workforce is able to meet the demands of the evolving economy. The VET Centre identified key competences as an interesting theme and asked the ETF for help with an initiative to enable vocational schools to meet these challenges through a new model for teacher competence development. The ETF designed a project with a special focus on lifelong learning and key competences in cooperation with the VET Centre and the Bureau for Education Services (BES), supporting the Montenegrin authorities to develop policy and practice in key competence promotion in vocational schools over the 2009-11 period.

The ETF project in Montenegro targeted teachers as the most substantial agents of change in the provision of key competences. The project therefore concentrated on a new model of horizontal and work-place learning for teachers that catered to the need for a more flexible, personalised mode of learning to replace the traditional short postgraduate courses. An agreement between the ETF and Montenegrin stakeholders established that: the teacher development should be embedded within their work in schools; learning should take place in teams and wider networks; and new approaches to the organisation of learning for students should go hand-in-hand with the personal and collective competence development of teachers. The main message was that teachers must take more responsibility for their own competence development, acquiring a broader repertoire of pedagogical methods and becoming empowered to exercise the choices available to them in their daily work.

The VET Centre created a preliminary network of schools interested in participating in a joint development effort from all regions of the country. At the initial meeting in April 2010, the stakeholders decided to focus exclusively on the key competence of learning-to-learn as this was identified as the most pressing challenge. The following pre-selected schools agreed to join the project: Beco Basic Secondary Combined[2] School (SMS), Plav; Marko Radevic Secondary Vocational School in Construction and Geodesy (SGGS), Podgorica; Sergije Stanic Secondary Vocational School (SSS), Podgorica; Ivan Goran Kovacic Secondary Combined School (SMS), Herceg Novic; Secondary Vocational School in Economics and Tourism, Niksic; Bratstvo Jedinstvo Secondary Combined School (SMS), Ulcinj; Secondary Vocational School (SSS), Cetinje; V. Aligrudic Electro-technical Vocational School, Podgorica; Secondary Vocational School (SSS), Pljevlja. All of the school leaders made strong commitments to firm anchoring of the project in the schools and school activities.

The VET Centre in Montenegro ran a pilot scheme to evaluate the willingness and capacity of vocational schools to design and execute this type of development work as a precursor to using the instrument more widely for in-service teacher training. The joint project aimed to inspire and coach a hand-picked group of teachers, preparing them to become teacher trainers for their colleagues. The starting point was taken in concrete and 'home-grown' project proposals corresponding to actual needs in school environments designed and implemented by teachers. The VET Centre and the ETF captured the successful experiences from this new model for change, providing further consolidation and support for the organisation of school-based in-service teacher training through development work in schools.

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2   Offering both general and vocational education.

4.1 ANALYSIS OF THE BASELINE SITUATION

Specialised university programmes for teacher education are delivered at three faculties of the University of Montenegro[3], but all university graduates are entitled to apply for teaching jobs as long as their profile meets the needs of a particular school. In reality then, all faculties of Montenegrin universities are actually preparing potential teachers, even those with no teacher training departments. Thus, graduate teachers from non-teacher training faculties begin their teaching careers with absolutely no pedagogical and didactic training. As a result, problems arising from the lack of appropriate pedagogical and psychological skills are especially concentrated in secondary VET, where many of the teachers are in fact engineers, economists, doctors, craft specialists, and so on.

Pre-service teacher training also has its issue however, as the courses mainly focus on the technical subject matter (90% of the academic hours), with only around 10% of content and time focused on psychology and pedagogy, most of which is taught in a theoretical context. Cooperation between teacher training faculties, the Ministry of Education and Sports and schools is weak, in a way that prevents student teachers from gaining satisfactory teaching practice and hands-on experience prior to their employment as teachers (Vujacic et al., 2006; Petkova et al., 2010).

According to Law on General Education (2002), an individual who has taken up employment at a school for the first time is considered a 'teacher-trainee' eligible for on-the-job training aimed at the independent performance of work within the range of their qualifications. A teacher-trainee with a higher

and university degree qualification is given this status for one year, completing their training in accordance with an established programme of educational work within institutions, under the direct supervision of an authorised teacher or mentor with at least the same degree of qualification as the teacher-trainee. The school principal appoints the mentor proposed by a professional panel or panel of teachers from within the institution. The trainee must pass a three-part professional teacher examination at the end of this period, covering: didactics of the subject taught; pedagogy and psychology; and school legislation for teachers (Vujacic et al., 2006). The professional examination is taken before a competent commission.

The BES is responsible for the design of a comprehensive system of in-service teacher training. It is the leading institution of the pre-university education system, encompassing research, advisory and development functions. The BES is also responsible for issues of general education in secondary vocational schools and is also, to some extent, responsible for vocational subjects in cooperation with the VET Centre, its partner institution. The World Bank recently supported the establishment of a national system for CPD for teachers in Montenegro, working on the basis of: (i) mentorship and induction for new teachers; (ii) a bi-annual teacher performance evaluation system; (iii) standardised professional titles for teachers; (iv) a career advancement pathway through promoted posts (teacher mentor, teacher adviser, teacher senior adviser and teacher researcher in teaching process); (v) training of teacher trainers; (vi) a catalogue of accredited professional courses on offer; and (vii) school-based continuing training for teachers (Petkova et al., 2010).

Montenegro has had some past experience with school-based professional development for teachers in general education in a model introduced to all primary and secondary general schools in 2009/10 with roll-out

to VET planned for the 2011/12 school year. A recent BES publication in Montenegro (Popovic et al., 2009) drew a distinction between the traditional and modern approaches to competence development, stressing that the contemporary approach should:

- be based on constructivist learning theory;
- be a continuing, long-term process;
- imply continuing, systematic support and monitoring;
- be in accordance with the needs of everyday practice;
- be linked to school reform(s);
- encourage teachers to be reflective practitioners and researchers;
- place great importance upon the context in which the knowledge will be implemented.

This general picture of pre-service and in-service teacher development in Montenegro was subjected to a 'reality check' during the ETF team preparatory visit to three vocational schools, in June 2010. During the discussions, it became clear that, wherever possible, teachers should have a master's degree in a relevant area combined with either a pedagogical background from university or teacher training induction programmes delivered during their first year of engagement at the school under the support of an experienced colleague.

Interviewees from the schools visited confirmed that it is the responsibility of each individual school to ensure teacher competence is adequate to deliver the curriculum requirements in the various education plans in a way that corresponds to the differing needs of students. Each school can request specific courses, with specific trainers, and receive any training they require as long as they have the budget to pay for this. However, as most schools have scarce resources for professional development of teachers, most in-service

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[3]   Preparing pre-school and primary school teachers and some general subject teachers for lower and upper secondary schools.

training is delivered by the BES or VET Centre, using recognised trainers for the delivery of what mostly amounts to the content covered by the catalogue.

This catalogue lists programmes for the professional development of teachers. It contains courses related to general subjects and to specific pedagogical problems and challenges, covering content for primary and secondary education, but with no specific provision for professional VET areas.

Training seminars for vocational subject teachers are organised by the VET Centre. However, during the last four to five years financial constraints mean training has only been organised where the financial and methodological support of donors has been available (e.g. Lux Development, GIZ, KulturKontakt Austria). Most in-service training is organised centrally and schools do not always feel that they have any influence over the content provided. Schools may organise seminars for their own staff – especially on information and communication technologies (ICT), teaching methods and foreign languages, but again, this is rare due to the high level of cost.

Teachers and school leaders in all the schools showed a high level of commitment to teacher competence development via a new and more economically viable approach.

4.2 DESIGN OF THE SCHOOL-BASED MODEL

The school-based CPD initiative gives schools the opportunity to think of alternative approaches to in-service teacher training. Based on positive feedback from the schools, the VET Centre agreed with

school leaders to free up local resources for project participants. Agreements were made for regular workshops to be held in the VET Centre in order to motivate and structure the work in participating schools, and for external expert consultancy support to be provided before and during the design process, giving some inspiration on topic selection, and during the implementation phases. Support in providing know-how for project-organised work in school teams was especially in demand. External consultancy was provided by an international expert and Forum MNE (a Montenegrin non-governmental organisation), thus laying the foundations for solid cooperation between governmental, public and civil society sector organisations in the field of education. A request was made for the main body of the work to be undertaken in the Montenegrin language.

The VET Centre guaranteed the necessary consultancy support and advice for schools, with the BES and VET Centre nominating two to three representatives to act as contacts for the CPD initiative and to form an interface between the local level schools and central level structures throughout the implementation of the various measures.

The school as an institution was selected as the unit for participation in the project. Each school nominated a core group of two teachers as prospective trainers and one principal. Schools were asked to design a development project proposal for the promotion of key competences and to take responsibility for its implementation.

One particularly serious challenge was encountered when the internal school planning process was repeatedly seen to form a barrier to projects, and the experience here identified some specific conditions a school must be aware of when planning project activities. Projects must be designed in accordance

with the overall school planning process and participants must be allocated the time, space and resources needed for project work. It also became clear that the many hours of unpaid work involved in pilot projects is often neither recognised nor registered and easily becomes an obstacle that could be eased with the provision of greater administrative support in schools.

Visible school leadership was agreed as a condition for project participation from the outset with the VET Centre. Development work in schools is often based on the wish of individual teachers to implement this type of innovative work, but this CPD design insists that projects must be properly anchored within the wider school organisation and with active leadership support. School leaders from the nine pilot schools therefore made a commitment to take responsibility, for enacting the necessary decisions, finding flexible pathways when needed and accepting that the CPD initiative is 'owned' by their schools and themselves. The fact that the BES has already introduced the concept of school-based professional development of teachers in all secondary general schools was an important enabling factor in helping the schools to assume ownership of the new model. The BES and the VET Centre also planned to introduce a similar approach in VET and combined schools from the 2010/11 school year.

Discussions conducted during school visits, meetings with school leaders, prospective trainers, the BES and the VET Centre, led to the development of the following training model for the first year as shown in **FIGURE 4.1**:

1. introductory days for school participants and BES and VET Centre representatives;
2. reflection period where participants identify and reflect on problems and challenges in their everyday work;

3. a three-day training course in Podgorica;
4. a development period where participants work on the development of concrete school-based projects and try to implement new methods in relation to these projects;
5. knowledge-sharing day for participants and staff members from the BES and the VET Centre.

The constituent elements would essentially consist of:

Intro-meeting

■ introduction to the school-based model for teacher professional development and to the training programme;
■ formulation of problems and challenges in Montenegrin upper secondary VET;
■ introduction to the guidelines developed for schools for the implementation of school-based professional development;

■ information on the support available from the central authorities;

Preparation

■ focus on problems and challenges formulated;
■ check the issues are valid and try to establish reasons and causes for these;
■ relate problems and challenges to:
  • learning environment, facilities and resources;
  • curriculum and central and local planning;
  • teacher competence;
  • traditions;

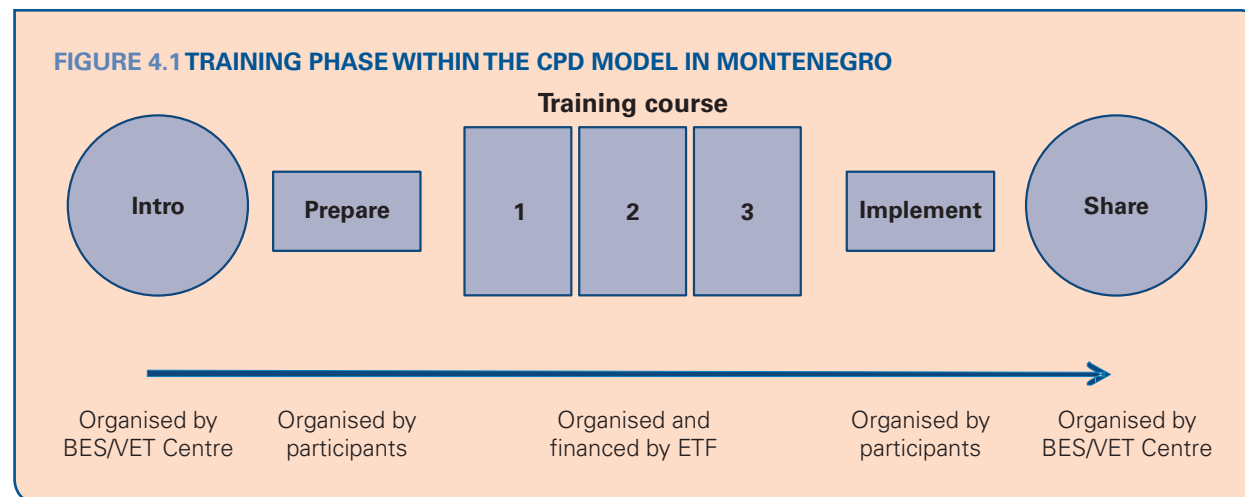*Train-the-trainer training seminars* (implemented by ETF consultants for teachers nominated to become trainers)

■ learning and learning styles;
■ vertical and horizontal learning approaches;

■ school development and teacher competence – improving both together;
■ the strategic element of learning and competence;
■ improving learning-to-learn competence in students;
■ teacher cooperation and knowledge sharing;
■ evaluate whether projects are worthwhile;

Implementation of the model

■ trainers work individually and in virtual groups on the development of new learning approaches in their schools;
■ trainers implement the projects they have designed[4] in line with the new skills and knowledge gained during their training.

BOX 4.1 presents a sample project assignment as an illustration of how this participant-led work can be organised simply in schools.

FIGURE 4.1 TRAINING PHASE WITHIN THE CPD MODEL IN MONTENEGRO

Training course

Intro — Prepare — 1 — 2 — 3 — Implement — Share

Organised by BES/VET Centre | Organised by participants | Organised and financed by ETF | Organised by participants | Organised by BES/VET Centre

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4   Eight of the participating schools chose to develop projects promoting the key competence of 'learning-to-learn', while the other chose 'ICT and entrepreneurship'.

BOX 4.1 ASSIGNMENT

What do we want you to do?

We would like you to change from traditional teaching to a learning process model in order to improve the learning-to-learn competence of students.

You can use various exercises, group-work, the project method, a changed classroom layout or other activities, and you can either establish a half-day activity in your own subject or you can present a more ambitious multi-subject activity in cooperation with colleagues. This is your choice as long as you adhere to the aim of improving the key competences of students.

We want you to plan and carry out a real project in your own school and to report back to us on your experience.

What do we want you to report?

At the next workshop in two-month time we would like you to give a presentation about your project answering the following questions.

- How was it organised?
- What did students do in the project (learning process)?
- Did you face any problems that made you change your plans or the way the project was implemented?
- Did you get any support from colleagues (school colleagues or trainer colleagues)?
- What results did you achieve in terms of improved learning-to-learn competences?
- What other results did you get?
- How did you overcome reluctance from students, if any?
- Can you describe your own role in the process, and describe what you found most difficult?
- How could the school, the system, colleagues, consultants or others have helped and supported you better?
- Could you describe what competence is needed and where your own competence should be improved?

We would like you to give a 15-minute PowerPoint presentation covering as many of the above mentioned topics as possible.

PROJECT WEBSITE

Part of the CPD initiative in Montenegro was a website that informed the public about the project and the results achieved, while also serving as an internal knowledge-sharing platform for project actors. The website was created within the official public government website of the VET Centre (www.cso.gov.me); a link pointed to the School-based Professional Development website (see **FIGURE 4.2**).

ESTABLISHING SCHOOL-BASED COPS

School-based CoPs for the professional development of teachers were established in each of the nine schools in 2011 on the basis of the 2010 training and implementation of learning-to-learn promotion projects in the schools. The trainers from the 2010 pilot projects, supported by the school principal, drew other teachers from their schools in and established CoPs. Thus, nine CoPs were established, ranging in size from 5 to 17 members depending on the school. The establishment and operation of the CoPs was included in the 2010/11 school plans for the professional development of teachers in all schools.

The trainers started by training their colleagues by following the training programmes and training methods delivered to them in 2010, using the model shown in **FIGURE 4.1**. Training took place in accordance with agreements between participants and the school director, along with the conditions for training in each of the schools, providing a detailed breakdown of when, where, how and with whom the training should take place.

FIGURE 4.2 WEBSITE FOR THE CPD MODEL IN MONTENEGRO

School-based professional development

| Project | Contact | Homepage | ETF |

Frontpage

Schools

Trainers

Good practice

Trainers CoP

This website contains information about a Montenegrin project on learning-to-learn competence for teachers in upper secondary education.

The project takes place at the school level and is supported by the VET Centre and the Bureau for Education Services. It is financed by the European Training Foundation (ETF).

Following the initial training period, the new trainees were invited to develop their own projects to promote learning-to-learn. During the implementation of the new projects, the newly established communities held periodic meetings to discuss their experiences, to analyse common challenges and to learn from the mistakes or good practices of others. Teachers worked to improve their own practice in terms of delivering more and better learning-to-learn competence to students through action learning. Teachers also worked in CoPs built on the principle of a horizontal learning network where they were learning together and from each other.

Trainers acted as facilitators in each of the nine CoPs, providing structure for the exchange of experiences and also sharing these with trainers from the remaining schools. Trainers also worked with other trainers from the CPD initiative in a second 'cross-school' CoP to share knowledge and improve the training with most of their communication taking place through the CPD platform. Furthermore, the trainers and facilitators of the nine school-based CoPs received supervision and counselling from ETF international and local consultants. The learning and competence development of teachers therefore occurred at two interrelated and mutually supportive levels: one within each participating school and the second at a complementary cross-school level, as illustrated in Figure 3.2.

Two external consultants worked with the project: an international consultant worked from a distance to support trainers and the local expert when required, while the local expert was far more closely involved

in the training, visiting the schools and supporting trainers when needed. Both consultants followed the training and contributed to the final knowledge-sharing conference at the end of the project. External experts and counsellors play a crucial role in sustaining methodologies, encouraging collaboration between institutions and facilitating knowledge sharing; and in this particular case, the involvement of a Montenegrin facilitator was immensely beneficial in overcoming language and other local barriers in the following rounds.

The ETF monitored the project very closely, providing back-up consultation, insights and recommendations at all stages of the design and implementation process for the CPD model. The ETF also cooperated directly with the VET Centre and the BES in order to ensure their support for the activities and to guarantee sustainability.

The VET Centre and the BES have been active partners in the project, taking responsibility for the appointment of trainers (from their list of qualified trainers) and following the project closely. They were also responsible for providing a website where examples of good practice could be published and trainers could share knowledge and materials.

4.3 MONITORING INSTRUMENTS

Project work, especially when implemented in a decentralised and school-based mode, needs clear guidelines and monitoring instruments to ensure successful execution and enable measurement of progress. Therefore explicit guidelines (see **BOX 4.2**) were provided for the nine schools participating in the CPD initiative developed in the first half of 2011.

BOX 4.2 GUIDELINES FOR MONITORING PROGRESS

Project proposals
Focused key competence (learning to learn, entrepreneurship).
Brief overview of the stage of school-based professional development (community of practice) at your school.
■   Is it fully developed and does it function?
■   Is your project part of the school annual school plan?

Enablers
Aim of the project: overall aim of the project in your school – including training for teachers as well as aim for students.
Objectives: specific objects for different target groups, different stages.
Target group(s): describe target groups (direct and indirect); give specific details and reasons for your selection.
Project team/trainers team.

Processes
Timetable:

Activity \ Month	I	II	III	IV	V
1. Preparation phase					
1.1 ...					
1.2 ...					
...					
2. Implementation					
2.1 …					
2.2 …					
...					
3. Closure, reporting					

■   How long have you planned for the project to take?
■   When should it happen?

Training plan:
■   How is training planned (whole days, a few hours per day, over a year, over a short period of time etc.)?
Training activities:
■   What kind of training activities have been planned or already implemented?
■   To what extent has practice been involved in training or to what extent have you planned for it to become involved?

Results
Satisfaction:
■   How satisfied are participants (teachers)?
■   How satisfied are students?
■   How satisfied are the local community members (school management, parents etc.)?
Key results:
■   Has there been an improvement in teacher competence?
■   Have students gained better competences (better grades)?
■   Has cooperation been improved at the school level?
Evaluation: evaluation plan of your project.
Identified obstacles and how to overcome them: changes in school-based competence development in the future.

Support needed
From central authorities:
■   Have you identified any elements where you would like to have the support of the central authorities?
From local expert:
■   Do you need any kind of support from the local expert in relation to implementing the knowledge gained by teachers in the classrooms and to the benefit of students?
■   Do you need support to improve the key competences of students?
■   Do you need any help with documentation of the achieved results?

4.4 OUTCOMES AND SUSTAINABILITY

There are good possibilities for capitalising on the school-based in-service teacher training after the ETF has withdrawn. In Montenegro, the division of work between the national authorities and projects in schools seems to function well and it is now important for new schools to join the network. The formal recognition of the school-based modality for in-service teacher training in Montenegro by the BES and the VET Centre provides a good legal and administrative basis for rolling out the CPD initiative at national level. The ongoing planning of the EU funding Instrument for Pre-Accession Assistance (IPA) IV presents a rich opportunity for sustaining the network and maintaining the regular national experience-sharing workshops. The process will be organised around the project logic of the European Social Fund – where local project proposals are forwarded to a national centre and money is allocated to run activities organised on a project work basis. It is exactly this logic that lies behind the preparation of this initiative and a vibrant project pipeline is already in place.

Twenty trainees have been prepared to work as trainers in schools, providing a special focus on the 'learning-to-learn' key competence, and they have been registered as potential teacher trainers with the BES. The experiences of the training programme have led to the insertion of a new entry for a dedicated school-based training programme in the national catalogue for professional development of teachers. This new programme will be delivered by trainers selected from the list of successful project trainees. The new trainers will deliver all further training on the learning-to-learn competence in the Montenegrin secondary education sector, including vocational schools.

5. LESSONS LEARNED AND RECOMMENDATIONS

This final chapter reflects on the lessons learned by the ETF in the course of piloting a school-based model for CPD for teachers in vocational schools before attempting to extract, structure and organise the main lessons learned to provide effective guidance for similar exercises in other situations or contexts.

5.1 CAPACITY REQUIREMENTS

ANCHOR INSTITUTION

An institutional 'home' for school-based in-service training is absolutely indispensable to ensure a systemic approach to this model. This national anchor point must provide resources, dimensioning, agreements with schools, strategic leadership and spaces for regular meetings of training network members. The provision of meeting rooms is essential in enabling systematic experience and knowledge sharing, new inputs to development work in accordance with national needs, the capturing of innovations and the dissemination of good practice to all vocational schools.

The model must be solidly embedded in school organisations and must be given sufficient professional and methodical resources as the implementation of the model could otherwise run into a whole range of economic, practical and collaborative barriers. In the concrete case of implementation in Montenegro, these obstacles were partly avoided through the initial signing of 'contracts' between school leaders and the VET Centre and the provision of a common development framework, professional consultancy resources and the establishment of a learning network for teacher trainers from the schools.

Each participating school must have a minimum of: (i) an active project they can carry from the initial idea to implementation; (ii) at least two teachers involved in the project; (iii) a committed school leadership prepared to provide the necessary frameworks and resources for the project; (iv) 'governance' details of the learning network project (the theoretical and methodical baseline of the project provided and maintained continuously by the VET Centre); and (v) a source of consultancy provided by national (and sometimes international) professional expertise for participants.

PEDAGOGICAL RESOURCE PLATFORM FOR LEARNING NETWORKS

The anchor institution will need to provide ongoing pedagogical expertise and methodological know-how to the schools involved in the local development work through the provision of specialised staff, either those employed directly by the VET Centre or others on short-term contracts, as it may often be necessary to mobilise ad hoc expertise in certain phases of the project. Trained teacher trainers from the learning network should be involved in this type of position at national level.

RESOURCE DEMANDS

School-based in-service teacher training for delivering key competences may be a very economical way to implement competence development in schools, but a certain degree of resourcing is still demanded.

There must be central allocation of resources for: the organisation of workshops and meetings for sharing experiences; the provision of staff resources for running the learning network; resources for mentoring in schools where these are needed; and the organisation of dissemination events and public relations initiatives. Schools must set aside the resources needed either to free the trainers from some of their ordinary teaching tasks or to compensate them in other ways. Schools must also make space for teams of teachers to undertake project work in their planning of the school year programme as a formalised strategy towards quality improvement and innovation.

INCENTIVES FOR TRAINERS

School-based in-service teacher training cannot be built on the basis of extra voluntary work by highly committed teachers willing to take responsibility for pedagogical development work by coaching their colleagues. Incentives for this kind of work must be provided at the system level, and there is an urgent need for trainers to be allocated the extra time needed to make this work part of their ordinary full-time tasks in schools. This type of training activity must be recognised centrally as an important step in career development, and trainers should also be officially certified by the Ministry of Education. Once officially recognised, trainers should be entitled to operate as teacher trainers in other schools and to be paid for their work. They should also be given privileged access to national conferences, donor-funded projects and other international activities.

EXTERNAL CONSULTANCY SUPPORT TO LEARNING NETWORKS

Schools need to be able to draw on free expert support and access other resource contacts through national institutions such as the VET Centre. In Montenegro, consultancy was offered by an international expert and a national counterpart, contracted by the ETF, and workshops were organised throughout the duration of the project to give opportunities for mutual inspiration and knowledge sharing between the participating schools. These external project consultants play an important role in determination of focus and concepts, selection of methods, dimensioning of the project and formulation of viable project proposals, and the process would be unable to operate without their input. Current experience shows their input is especially important in maintaining progress in continuous professional development.

Consultants also have an important function in maintaining a 'driving' force in project-organised work in schools as development work is not for beginners. In Montenegro, most of the participants had some project experience and the working method was already known among the selected trainers. However, project formulation requires a considerable amount of writing-meeting-thinking work that demands high levels of concentration from the project team that can be hard to achieve in the time slots available within the planned allocation of teaching tasks in schools. External consultants can be extremely supportive on this front, helping to drive the process onwards.

5.2 KNOWLEDGE SHARING

Teacher-to-teacher knowledge sharing and dissemination does not simply happen; an organised and planned dissemination strategy is needed. In the CPD model, knowledge sharing was organised through a horizontal learning network, where teacher trainers met regularly across the participating schools. These shared presentations of experience have demonstrated that the in-school and cross-school networks have provided inspiration, energy and focus while also disseminating good examples of renewed practice. The teachers involved aim to continue the networks after the project has ended, building upon the synergies and knowledge captured while the nine schools were working together within a common framework, and disseminating these through open theme arrangements for many more participants.

The concept of knowledge sharing among group members within the school-based CoP and the idea of cross-school knowledge sharing must therefore be carefully introduced and discussed, and the electronic platform created. Results in terms of useful tools, methods, new knowledge, good ideas and tips should be published systematically via the electronic platform with knowledge and experience shared throughout the process and systematised at the final project workshop.

5.3 RECOMMENDATIONS

The following recommendations are made on the basis of these reflections.

RECOMMENDATIONS FOR POLICY MAKERS

- Formalise and institutionalise school-based in-service training for VET as a complementary component to the continuing training courses, while establishing a solid pedagogical pre-service teacher training for VET teachers, preferably in a dual system mode, where university education alternates with classroom training.

- Establish a national career structure for teachers, capable of approving and appreciating the additional work of trainers and schools, and offer attractive incentives for those teachers committed to improving the quality of teaching and learning in schools.
- Make use of external funds, where possible, to ensure that new models take off and become a self-sustaining part of teacher competence development.

RECOMMENDATIONS FOR SCHOOL LEADERS

- Make continuous in-service teacher competence development an integral part of the annual school plan and ensure dissemination to different communities.
- Set aside the necessary internal resources within the school to professionalise trainers within their new function and seek external financing for expanding school-based development activities.
- Take a strong and visible leadership stance on pedagogical development work in schools and actively support creativity, innovation and quality development of teaching and learning processes.

RECOMMENDATIONS FOR TEACHER TRAINERS/COP FACILITATORS

- Professionalise the new role of school-based teacher trainer and work toward official recognition of the function within overall school organisation.
- Sustain and develop the CoP established with colleagues from the other schools and use the web-based platform as much as possible.
- Take initiatives and make proposals (alone or with colleagues in the CoP) in interactions with the VET Centre and the BES to expand your trainer activities.

ACRONYMS

BES   Bureau for Education Services

CoP   Community of practice

CPD   Continuing professional development

ETF   European Training Foundation

EU   European Union

GIZ   Deutsche Gesellschaft für Internationale Zusammenarbeit (German Society for International Cooperation)

ICT   Information and communication technology

VET   Vocational education and training

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