

Technical Assistance Consultant's Report

Project Number: 47227-001

September 2017

Republic of the Union of Myanmar: Skills Development for Inclusive Growth (Financed by the Japan Fund for Poverty Reduction)

Prepared by ADB consultant Carsten Huttemeier.

For the Ministry of Education (Executing Agency for TA 8634) and Ministry of Industry.

This consultant's report does not necessarily reflect the views of ADB or the Government concerned, and ADB and the Government cannot be held liable for its contents. (For project preparatory technical assistance: All the views expressed herein may not be incorporated into the proposed project's design.

Asian Development Bank



TA 8634-MYA: Skills Development for Inclusive Growth Financed by the Japan Fund for Poverty Reduction (JFPR)

Concept Paper for a Teacher Training Program for TVET Teachers in Myanmar

October 2014 (revisions & edits October 2016 and September 2017)

Preface

This informal Concept Paper compiles and distils from the literature on education and training as well as on-the-ground experience and provides an outline for a pedagogically focused teacher training program for technical and vocational education and training (TVET) teachers employed at TVET institutions in Myanmar.

The program contains 16 units or standards, which all has been defined with areas of learning and performance criteria as well as assessment criteria. Each unit can be delivered as a "stand alone" unit. Especially units concerning assessment can be delivered directly to external assessors in order to train them for assessment in the GTHSs, ITCs as well as in CBMSCs.

The units come with a full training package with learning packages and learning examples. Each unit also defines the training and learning requirements in terms of equipment, why this document also can be used as basis for establishing centre of excellence with vocational teacher training and research departments.

The course is divided into theory, practise and self-study and should be supported with the use of master trainers in the TVET institutions.

In future, the course should be compulsory for any teachers, public as private, who is recognised as an accredited training institution by DTVE.

Carsten Hüttemeier Skills Development for Inclusive Growth (ADB TA 8634 MYA) October 2016, Nay Pyi Taw, Myanmar

Disclaimer:

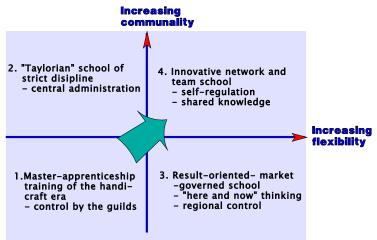
The views expressed in this paper are those of the authors and do not necessarily reflect the views and policies of the Government of Myanmar or any of its agencies, the Asian Development Bank (ADB) or its Board of Governors or the governments they represent, or the Government of Japan. ADB and its partners do not guarantee the accuracy of the data included in this publication and accept no responsibility for any consequence of their use.

By making any designation of or reference to a particular territory or geographic area, or by using the term "country", this document does not intend to make any judgements as to the legal or other status of any territory or area.

List of content	Page
Preface	2
Introduction to teacher training program	4
Program content	12
Unit 1: Student centred learning	15
Unit 2: How to work with learning outcomes	19
Unit 3: Facilitating learning – new teacher roles	23
Unit 4: Present and future competence needs within TVET education	30
Unit 5: Pedagogical framework of TVET programmes	36
Unit 6: Different students – different learning needs	42
Unit 7: Adult learners in TVET	47
Unit 8: Facilitating learning for students with special educational needs	52
Unit 9: Initial career counselling	57
Unit 10: Development of a learning environment in TVET	61
Unit 11: Effective communication – in theory and practice	69
Unit 12: Pedagogical leadership, enhancing effective learning	76
Unit 13: Assessment strategies, including students' self-assessment	82
Unit 14 Teacher development – colleague support	89
Unit 15: TVET development projects	94
Unit 16: TVET development projects	99

Introduction to TVET Teacher Training programme

The need for an TVET teacher' training programme in Myanmar has emerged because of new needs for competences in the labour market. ETF (2007) describes four stages of education organisation as below¹:



Source: Adapted from ETF (2007).

The two axes in this figure depict 2 important dimensions, which ETF (2007) terms:

- 1) Increasing **flexibility**, which means the possibilities of changing something in TVET are increasing;
- 2) Increasing communality, which means the role of society is becoming stronger in organising TVET.

In many countries, TVET for manual work was originally based on the master-apprentice system (stage 1 above), in which the apprentice, closely guided and controlled by the master, gradually acquired the capabilities needed in the work, and finally attained the journeyman's status. The principle of the organisation of education is that the newcomer learns from the expert, typically through side by side training. Modern learning theories have been inspired from these principles when they stress that a lot of TVET skills cannot be read in a book, but must be learned in practice.

Over time, TVET was institutionalised, and craft institutions, preparatory vocational institutions and 'colleges' were established. The so-called "Taylorian school" (stage 2 above) came into existence, primarily based on lecture-type teaching, strict discipline and (book) knowledge to be learned by heart. Educational administration became more complex and centralised. Curricula and other regulations concerning education were issued by the central authorities. Sometimes this teacher centred training is called copypaste method. This means that the teacher copies or reads all the text from books to the blackboard or slide of overhead projector and the students write down all that text or speech to their notebooks — it could sometimes happen that they (the teacher and students) do not even think about the matter!

As the rest of society became less centralised and more governed by market trends, education, too, developed in this direction. Once again, education began to be strongly governed by vocational and local goals (stage 3 above). The centralised administration was partly dismantled, and almost all decisions could be taken at the institution level. This was the birth of the "result-oriented, market-governed institution". Education was governed by the Just On Time (JOT) principle, i.e., activity was in line with the needs and

_

¹ European Training Foundation (ETF). 2007. ETF Yearbook 2007—Quality in Vocational Education and Training: Modern Vocational Training Policies and Learning Processes. http://www.etf.europa.eu/web.nsf/pages/ETF_YEARBOOK_2007: QUALITY IN VOCATIONAL EDUCATION AND TRAINING AND MODERN LEARNING PROCESSES

expectations of working life just now. Result objectives and quality systems for institutions were drawn up. The main attention was focused on the employment prospects for students. Thus, education became more flexible, and even at the local level curricula, teaching fields and student volumes could be quickly adapted, which allowed a rapid response to the needs of the working life. Education was individualised, since everyone could study the field of their choice and apply more student-centred working methods.

The last stage of organizing TVET (stage 4 above) is the most dynamic and co-operational. Education is currently looking for new paths. The aim of the new educational policy is that education should not only follow the changes in society and working life but also contribute to developing them. Education and learning do not only occur inside schools; rather, the objective now is an "innovative network and team school". Such education is future-oriented and based on the ideology of lifelong learning. It recognises the fact that people can also learn outside institutions, for instance on the job, and that there is no certainty about the knowledge and skills needed in the future.

For this reason, education provides a diversified package of capabilities, and the ultimate vocational skills are attained through learning on the job. Education relies on networks, expert teams, internal team activity, an open and individual study plan, and self-regulation. The institution as an organisation relies on teamwork, which makes it possible to use the instructors' personal characteristics, education and experience to benefit the learners. As regards teaching methods, institution work also relies on communality, frequently using a project-type, development-oriented approach, where the development targets which are found in working life. As to the learning environments, they include authentic workplaces and the rapidly developing information and expert networks. Education is flexible; the vocational teacher and student teams can continuously re-focus the education according to learning needs. The teams have the responsibilities, competences and resources required for this.

The new Myanmar TVET teacher training programme takes it is starting point in the 4th square in the above model and includes relevant elements from the three former models.

The new, emergent education thus contains certain characteristics of the master-apprenticeship training, as well as certain characteristics of the "market demand-driven" institution. To a great extent education is guided by the diversified expertise of the teachers and the joint decisions of the teams. The new institution poses an enormous challenge for the new teachers. The role of the central educational administration will decrease, and even at the local level, the role of general administration and institution directors in the daily work will clearly diminish

The importance of competent vocational teachers in the TVET sector cannot be overestimated. Vocational teachers are one of the key factors of effective training and learning at TVET institutions. The education of vocational teachers is the key determinant of the quality of these.

Competent Vocational Teachers

The strategies of EU (Lisbon, Copenhagen) can only be implemented with a large cohort of competent Vocational Teachers – and TVET institution principals. The Copenhagen process stresses innovation, entrepreneurship and internationalisation. It is not enough to write the concepts in reports or even in legal documents. – It is not enough for the TVET institutions to offer courses in "Innovation and entrepreneurship" or "Foreign languages" – or state that so and so many students have attended the courses.

The concepts of innovation, entrepreneurship and internationalisation can only be implemented if the learning environment of the TVET institution reflects these concepts. The pedagogical practice, the

teaching methods, the assessment methods, must underline the institution's strategy in this field. New learning theories state that the learning environment and the teachers as role models are extremely important in order to improve the students' vocational competences for the future labour market. This calls for the TVET institutions to develop their own implementation strategy. It also requires focused TVET institution management and competent vocational teachers – competent both when it comes to their substantive domain (their professional know-how and working life skills) but also in relation to development of the students' competences, which is the key issue of any vocational teacher: **To be able to teach someone else to learn**.

The proposal presented below reflects and responds to the needs for a modernization of the Myanmar Vocational Teacher Training system.

In Myanmar the design and implementation of a National Qualification Framework is still in its very beginning phase. In the context of a vocational teacher training system it is proposed that the content and approach should reflect the principles of at least proposed diploma level 5, which should highlight the competence: "To use wide range of comprehensive and varied theoretical skills and practical knowledge to develop strategic approaches to tasks. To manage their role under guidance in contexts that are usually predictable, but where factors are variable. Supervise routine work of others and take some responsibility for the training"

The European Union has² defined a number of core competences when it comes to life-long learning; competences necessary for competition in a global perspective. These competences are:

- 1. **Communicative competence in the mother tongue**. The ability to express and interpret ideas, thoughts, feelings, facts and opinions orally and written (listen, talk, read and write) and to use the language appropriate and creative in all societal and cultural relations within education, vocational education, on the labour market and at home
- Communicative competence in foreign languages. As a starting, point the same skills as in the
 mother tongue. The individual must be able to understand, express and interpret ideas, thoughts,
 factual matters and opinions orally and written (listen, speak, read and write). It also includes
 communication and understanding of other cultures.
- 3. Mathematical competence and basic competence in nature and technological science. Mathematical competence is the ability to develop and use mathematical way of thinking with the purpose of solving everyday problems. The nature science competence is the ability to use knowledge and methods from this domain to explain what goes on in nature and ask questions, and conclude based on experience. The technological competence is the ability to use this knowledge and methods in order to find answers on needs and wishes of humankind.
- 4. **Digital competence**. Digital competence includes a confident and critical use of information technologies at work and for all other communication.
- 5. **Learning competence**. "To learn how to learn" is the ability to start and continue a learning process, to plan own learning individually and in a group. This competence includes consciousness of own learning processes and own learning needs, and the ability to overcome obstacles in order to secure a successful learning.
- 6. **Social and democratic competences**. These competences personal, interpersonal, intercultural, social and democratic cover all forms for behaviour, which makes it possible to take part in society in an effective and constructive way, especially in heterogeneous societies.

6

² RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 on key competences for lifelong learning (2006/962/EC)

- 7. *Initiative and entrepreneurship*. These competences are the ability to realize ones ideas. It includes creativity, innovation and the ability to plan and manage projects in order reach certain goals.
- 8. **Cultural consciousness and the ability to express this.** Acknowledgement of the importance of being able to express ideas, experience and feelings in different ways and media, including music, arts, literature.

These competences will be addressed and included in the below presented vocational teacher' training programme.

Main principles in the programme description

The vocational teacher' training curriculum is competence-based with a functional analysis approach and thus it follows the structure and methodology applied in other international teacher training programs. The following will give at description of the consideration regarding aims and contents, structure, and the pedagogical approach of the vocational teachers' training programme.

The aim and contents of the vocational teachers' training programme

The aim of the vocational teachers' training programme

The aim of the programme for an vocational teachers' training programme is that the vocational teachers trainee will:

- Acquire foundations for working with provision of technical vocational education, training and development
- o Develop professionally and personally
- o Acquire foundations for further and continuous pedagogical development

It implies a changing of focus on competences to be acquired by the learners and on the learning outcomes. It also implies the training of the vocational teacher trainees to be free, responsible, and competent teachers being able to renew their teaching strategies and reflection on the learners in a lifelong learning context.

Preparing vocational teachers for present needs and life-long learning

The aim of the vocational teachers training programme is that the teacher trainee will acquire foundations for working in providing vocational education, training and development. It implies that the programme is focused on development of the teacher trainees' competences much more than on academic knowledge. In addition the aim is to develop the teacher trainee both professionally and personally. It implies that the vocational teacher's profession consists of professional and generic competences, which can only be developed jointly. Finally, the aim is that the teacher trainee acquires foundations for further and continuous pedagogical development. This aim is specially focused on the fact the competence needs of the vocational teacher on an ongoing basis will change throughout his/her career. Thus, he/she must be able and willing to continue with competence development in a lifelong perspective.

The vocational teacher-training programme – a programme for development of present and future TVET competences

The TVET teacher' primary task is to teach and train the TVET students to be competent in the future labour market of Myanmar and to become democratic citizens with competences for life-long learning. In this respect, the vocational teachers must be able to be seen as role models for their students; i.e. the vocational teacher-training programme must be planned and carried out according to the new principles of education, so that the future TVET teachers themselves have got competences for life-long learning.

'Learning to learn' is the ability to pursue and persist in learning, to organise one's own learning and manage time and information, both individually and in groups. The competence includes awareness of one's learning process and needs, identifying available opportunities, and the ability to overcome obstacles in order to learn successfully. The competence also means gaining, processing and assimilating new knowledge and skills as well as seeking and making use of guidance. Learning to learn competence includes that learners build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts: at home, at work, in education and training.³

The vocational teachers must be able to implement new national and/or international strategies in the institution based planning; for instance, he/she must be able to include innovation, entrepreneurship, and internationalisation strategies in ITCs, GTHSs and GTIs.

The vocational teacher' special domains

The programme takes into account the special professional domains of the vocational teacher, having to be able to connect the substantive domain (professional knowhow and working life skills) with the pedagogical domain (mastery of the educational process and educational skills), the research domain (development skills) and the organisational domain (team and network skills).

The structure of the Vocational teachers' training programme

• The programme is competence and output based

The programme is competence and output based. To have competence means that you are able to act. Actions presuppose knowledge, understanding and skills. Competences are normally described in learning outcomes. A person is competent within an area, when he is able to analyse a general problem within the area, and is able to suggest different solutions, and choose the most suitable solution. Furthermore, he must be able to plan the job, carry it out, and finally evaluate the result. A vocational teacher must be competent both within the vocational area (the substantive domain) and within the vocational educational area (the pedagogical domain).

• The programme is modularised

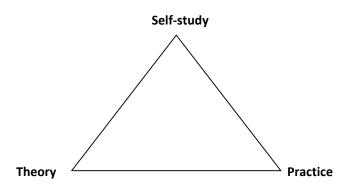
The programme is modularised using the modules as an organisational and a pedagogical principle. From an organisational point of view the teaching is broken into smaller self-contained learning units, which in themselves are meaningful in respect of content and time. The modules can be individually assessed and combined in a way to form a partial or a full qualification. From a pedagogical/didactical point of view, teaching in modules implies a changing of focus in teaching – from subjects and methods of teaching to meaningful units for the individual learner and his/her learning/life experience, and to a problem-based approach instead of a subject-based approach

A sandwich model

The vocational teacher-training programme is built up as a sandwich model, consisting of three different learning contexts: theory, practice and self-studies. Together the three different learning contexts contribute to developing the teacher trainee's professional and personal development. By the close connection between theory and practice — and the possibility to comply with special individual wishes and needs — the vocational teacher trainee provides an initial starting point for his/her job as a vocational teacher. The three learning contexts set the scene for the vocational teacher trainee to prepare, perform, and evaluate pedagogical experiments. The learning activities in the three learning contexts are different; nevertheless together, they are the basis for the vocational teacher trainee's development of competence.

³ European Union, Education Council 2006, annex paragraph 5

Each module consists of theory, practice and self-study. The percentage differs from unit to unit because the learning outcomes of the individual units demand different learning and working methods; - some of the units will need many lessons (theory) while the learning outcomes of other units are based on a great percentage of practice and/or self-studies. The model is illustrated next page:



The theoretical part

In the theoretical context, the focal points are acquisition of educational theories and educational methods, establishment of a basis for a professional vocational teacher's role, presentation and discussion of different experiences and experiments with pedagogical working methods (lectures, presentations, cases and discussions). The contents of the theoretical part of the programme are found within the following academic disciplines: pedagogy, psychology, didactics, sociology, educational planning and development work.

• The practical part

The focal points of the practical learning are the training of own competence development when it comes to planning and teaching, action-learning, contextual learning, training the working methods (workshops, observations, feedback, instruction, dialogue and supervision). The practice part consists of observation of learning activities performed by a master trainer/teacher and of performance of learning activities and experiments in the vocational teacher trainee's own class under supervision and subsequent dialogue with the master trainer. The practice part gives possibilities for the vocational teacher trainee to visit other institutions in order to observe different ways of creating an inclusive learning environment. In all, the vocational teacher trainee trains, experiments, observes, and reflects on the vocational teachers' practice in order to develop his/her own practice.

Experience from practice is described in the portfolio.

• The self-study

The focal points of self-studies are more profound study of theories, reflection on one's own practice, the ability to handle complex technical vocational educational problems and choose relevant action, ability to transform experience and theory into knowledge.

In the self-study part, the vocational teacher trainee focuses on special themes of the unit relevant to him/her and his/her ITC/GTHS or GTI. In the self-study period the vocational teacher trainee reflects on

personal views regarding the theme of the unit by observing and describing own practice. The vocational teacher trainee describes, analyses, evaluates, his/her experience in a portfolio.

The aim of the self-studies is for the vocational teacher trainee to be able to

- Observe and describe own practice
- > Reflect on personal views on teaching and learning and his/her own teacher role
- Describe, analyse, evaluate, and be able to communicate problems in the teaching and learning process in a portfolio.

The pedagogical approach in the vocational teacher' training programme

Student centred learning

The needs of the learners are in the centre. Consequences of this approach are a holistic pedagogical organisation and emphasis on student centred and differentiated learning methods and development of the vocational teacher's role as facilitators.

The vocational teacher facilitates the students' learning processes

The vocational teacher must develop new roles and functions in facilitating learning, which means that the teachers must have a broad range of competences when it comes to his or her performance together with the students. It also means that the vocational teachers must have competences when it comes to preparing new learning activities. It is important in this connection to enhance the vocational teacher's competences in interdisciplinary, problem-based planning and their ability when it comes to communication skills and working in teams.

• The vocational teacher is a reflective practitioner

The vocational teacher must become reflective practitioners. That means that the teacher must be able to connect his/her theoretical knowledge with experience in learning processes, and thus be able to reflect-in-action and reflect-on-action and imply this approach in his/her teaching. In order to develop this competence the portfolio is an important tool. The aim of the portfolio is to document the teacher trainer's study, learning, and personal development in connection with the learning outcomes of the units.

• The master trainer

The practical learning is supported by a master trainer. The master trainer is an experienced teacher employed at the ITC/GTHS or GTI. The master trainer must have competences in observation, feedback and other colleague supervision techniques; and with exhaustive knowledge of the teacher-training programme (trained at a special course for example abroad). The master trainer is linking the educational part carried out at the pedagogical faculty with the practical part carried out at the training institution and the teacher trainee's self-study through dialogues with the teacher trainee and the teacher master trainers.

The tasks of the master trainer is to guide, support and challenge the teacher trainee in order to develop his/her competence with regard to the learning outcomes

Portfolio

An essential component of the teacher-training program will be the portfolio and the logbook. Reference to the portfolio has already been made and the principles of a logbook will be outlined below. Both concepts should ideally be used as supporting aids for both the master trainer and the teacher trainee.

"Portfolio", as perceived within the world of education and training, can be seen as a type of learning record providing actual evidence of achievement. Learning records are closely related to the learning plan, a tool that is used to manage learning by individuals, teams, communities of interest and organisations. To the extent that at personal learning environment captures and displays a learning record it also might be understood and used as an electronic portfolio, as described below. There are various, most often very similar, definitions of a portfolio. The one applied to in this paper is:

Portfolio is a systematic collection of the teacher trainee's works and deliveries. It is composed, gathered and selected by the teacher trainee himself/herself. It documents teacher trainee's performance, progress and achievements during a specific period.

In addition the portfolio includes the teacher trainee' own reflection and self-evaluation in relation to both selection of task and learning processes.

• Finally, the portfolio looks forward when the teacher trainee identifies/formulates future targets/challenges.

How can the portfolio support both the individual learner and the master trainer?

Using the portfolio continuously and systematically can in several ways prove to be an excellent aid in the process of becoming a skilled and professional TVET teacher. The portfolio provides the option for the teacher trainee to focus on:

- How to describe and sustain what has been learned during the whole TVET teacher education.
- To reflect on and evaluate one's own learning process and the outcome from it.
- The possibility of presenting a personal description of the process based on own experiences.
- The pride in and the "kick" of having access to present one's own products in the portfolio.

The portfolio used in the TVET teacher programme

The portfolio as used in the TVET teacher programme will develop along with the presentation and implementation of the 6 programme modules. This also has the implication that portfolio apart from the standard elements like name, place, time and table of content right from the beginning shall be seen as an "empty" shell or a skeleton which gradually is provided with "flesh and blood" and thus becoming a portfolio in its strict sense.

In addition it is proposed that the portfolio should be used both in the traditional sense in a paper version and as an electronic version, also known as **e-portfolio** or **digital portfolio**.

This web-based portfolio is a collection of electronic evidence assembled and managed by the users themselves. The electronic evidence may include all the materials and texts mentioned above and in addition electronic files as Microsoft Word and Adobe PDF files, images and multimedia, blog entries and hyperlinks.

What could be filled into the portfolio will be highlighted in each of the learning packages linked to each unit. The content of the portfolio to be gradually developed will/can consist of various papers like: plans, hand outs, external links, relevant literature concerning the specific subject, own (student) papers, others' and own papers, logbook, own reflections and self-evaluation and thoughts and ideas.

Programme content

The programme consists of six modules with 16 units. The total length of the programme is one year, corresponding to 35 weeks. See description next page.

Number	Module		Unit	Duration
1	Introduction	1.1	Student centred learning	2.32 weeks
		1.2	How to work with learning outcomes	2.32 weeks
		1.3	Facilitating learning - New teacher roles	2.32 weeks
2	Institution based planning	2.1	Present and future competence needs within the vocational education	2.32 weeks
		2.2	Pedagogical framework of TVET programme	2.32 weeks
	Students and teachers in the learning environment	3.1	Different students – different learning styles	2.32 weeks
		3.2	Adult learners in TVET	2.32 weeks
		3.3	Facilitating learning for students with special educational needs	2.32 weeks
		3.4	Initial career counselling	2.32 weeks
		3.5	Development of a learning environment in TVET	2.32 weeks
4 C	Delivery and performance	4.1	Effective communication – in theory and practice	2.32 weeks
		4.2	Pedagogical leadership, enhancing effective learning	2.32 weeks
5	Monitoring, assessment and evaluation	5.1	Assessment strategies, including students' self-assessment	1.17 weeks
te	Professional development of the teacher role, the TVET institution, the TVET education	6.1	Teacher development – colleague support	1.17 weeks
		6.2	TVET development projects	2.32 weeks
		6.3	Final project	2.37 weeks
			Total	35 weeks

Content for module and unit descriptions

In the next section the units will be described by using the below content. It should be mentioned that it is an aim to harmonise the unit description with a competency standard format to be decided upon, thus learning outcomes can be converted into elements of competence and performance criteria.

Name of module and unit: Title and code of the unit

Guidance/ Description: A short description of the essence of the unit

Distribution theory, practice, self-study

Theory:

Practice:

Self study:

The division of the unit into theory, practice and self-studies. The percentage between the different parts will be different according to the learning outcomes of the unit.

Learning outcomes: Each unit consists of one to four learning outcomes.

A learning outcome is a set of measurable results against which an individual's progress and achievement will be judges during or at the end of a process of learning, development or training.

It defines the competence you want to develop

Learning outcome No. and name

Each learning outcome is described in separately – followed be a description of knowledge, understanding and performance criteria in order to make it clear what to do and learn in order to gain the necessary competence.

Knowledge and understanding

The necessary knowledge and understanding is described in headlines.

• Performance criteria

The specific performance criteria is described

Learning environment

The recommended learning environments described for as well the faculty, the TVET institution, as for the self-study. For instance:

- The faculties: It is recommended that the faculty offers lessons and facilitators, access to library and internet, and organises an electronic portfolio
- The TVET institution: it is recommended that the TVET institution offers possibilities for training and provides the teacher trainee with a master trainer
- The self-study: It is recommended that the teacher trainee has time and space for studying and reflection and for his/her work with the portfolio

Assessment

The way the assessment is performed, whether it is a written report a performance of a lesson or something else.

The learning package

Each unit description will be followed by a learning package. Learning packages in this project are thought of as a support to both the trainees and master trainers.

The purpose of the learning packages is to help the teacher trainees, the teacher master trainers, and the mentors to:

- Get useful information in relation to teaching staff, the trainees, rules and regulations and when and where the different activities are supposed to take place
- What the unit consists of in terms of learning outcomes, under which conditions it will be done and how assessment will take place
- Support in relation to do something reading, listening, doing activities, discussions with the instructor etc.

LEARNING PACKAGE CORRESPONDING TO UNIT XX (OR OSS)

Principles of delivery

The principles of delivery are described in general and in all three learning arenas (theory, practice, and sel-f study)

Unit outline

The content of the unit is described in order to give a general view of the context of the unit

Working methods

The working methods are described in the theory part, the practice part, and in the self-study period.

Examples of activities

There will be examples of activities specific for each unit

References

List of relevant literature

Documents

Links to relevant documents (for instance prepared by the faculty staff, it might be compendia, articles etc.)

Links

Internet links

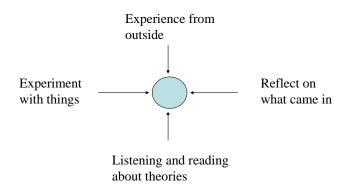
UNIT DESCRIPTORS & LEARNING PACKAGES

Unit 1: Student centred learning

Guidance/ Description

The focus of the unit is student centred learning, it will be emphasised that learning is constructed by the individual learner – due to life long experience from institution and elsewhere. In this process the teacher plays an important role by organising a motivating framework for learning, making it possible for the students to perform experiential learning. It can be illustrated like this

How to learn



Distribution theory, practice, self-study

Theory: 30% Practice: 30% Self-studies: 40%

Learning outcomes

- 1. The teacher trainee performs student centred learning
- 2. The teacher trainee enables the students to organise own learning

Learning outcome No. 1

The teacher trainee performs student centred learning

Knowledge and understanding

The teacher trainee must know and understand:

- The ingredients of a learning process
- David Kolb's concept of experiential learning
- What is required of activities in order to be good for learning
- What reflection in practice and on practice is about and how it can be conducted

Performance criteria

The teacher trainee must be able to:

Organise and carry out an experiential learning processes in a chosen area

- Support students choice of activities to work with, and to learn from
- Facilitate students in their work on the chosen activities
- Make students to reflect on their own practice and in their own practice in order to put words and concepts on their experience.

Learning environment

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding
- The faculty offers a learning environment with facilities for group work in connection with project oriented learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also for use in self-study periods
- In the practice part the teacher trainee experiments with putting up framework for learning and enables the students to organise own learning

Learning outcome No. 2

The teacher trainee enables the students to organise own learning

Knowledge and understanding

The teacher trainee must know and understand:

- The importance of creating a motivating and learning atmosphere
- the importance of developing the students to responsible learners with initiative

Performance criteria

The teacher trainee must be able to:

- Create a motivating and learning atmosphere
- Make the students understand their own responsibility for the learning process

Learning environment

- The faculty offers a learning environment with facilities for group work in connection with project oriented learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also for use in self-study periods
- In the practice part the teacher trainee visits external partners (social partners, representatives of local trade and industry in order to get empirical data

Assessment

The teacher trainee delivers a lesson on student centred learning using methods supporting experiential learning

LEARNING PACKAGE CORRESPONDING TO UNIT 1

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees in relation to this special unit.

The practice part in this unit consists of the teacher trainee's experiments with creating a motivating learning atmosphere in the classroom

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods.

Unit outline

The focus of the unit is student centred learning, it will be emphasised that learning is constructed by the individual learner – due to life long experience from school and elsewhere. In this process, the teacher plays an important role by organising a motivating framework for learning, making it possible for the students to perform experiential learning.

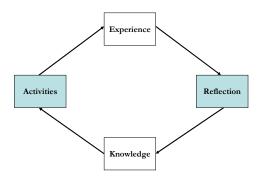
Working methods

The working methods of the unit will be student centred, illustrating the concept of student centred methods and experiential learning. There will be methods such as reflection exercises, active methods of understanding concepts, common gathering of experience and active experiments

Examples of activities

The following experiential learning cycle illustrates what participants should do in order to learn from the experience they get from doing and reflection

Experiential learning



So choose an activity related to Student-centred learning, Resource-based learning and/or Learning Outcomes and try to do it. It will give experience itself. After this experience, reflect then on the experience in order to find out what happened, what went wrong, what was good, why it happened and what should be changed till next time. Reflection should take place in action (when you actually work on things) and on action (after you have finished and is at a distance from what happened.

One method of reflection is "The red thread"

As a teacher, you have the responsibility for planning, carrying out, and evaluating the teaching process. However, as an adult teacher you have the advantage that the students want to and must be trained in taking responsibility. The teacher must demonstrate methods enabling the students to do so.

One way of doing so is to **keep the red thread.** That is to establish connection between the content of the course from one day to another, noting:

- Points
- Experiences
- Important discussions

Please hold the thread in turn from one day to the other in groups of 2-3.

Every morning we will start with *the red thread*. The group:

Points out important issues from yesterday's teaching Has made observation on yesterday's processes

- the composition of the day,
- the rhythm,
- the engagement of the participants
- methods which worked
- methods which didn't work

The group presents **the red thread** as they wish.

References

Literature

Brandes, Donna & Paul Ginnis (1986) *A guide to Student-Centred Learning*. Simon & Schuster Education Kolb, David A. (1984) *Experiential Learning*. Englewood Cliffs, NJ: Prentice Hall

Documents

Documents on performing student centred learning:

Documents on enabling the students to organise their own learning:

Links

Student-centred learning:

http://lsn.curtin.edu.au/tlf/tlf2000/sparrow.html

Experiential learning: https://www.lsneducation.org.uk/user/order.aspx?code=072762&src=XOWEB produced by Learning and Skills Network (2007

Unit 2: How to work with learning outcomes

Guidance/ Description

The focus of this unit is how to develop learning outcomes. One of the important ingredients of a learning environment is the learning outcomes, set up in order to show students what they are expected to know about and be able to do after completion of the unit. Learning outcomes are about 1) knowledge and understanding, 2) skills (practical and intellectual) and 3) competence (responsibility and autonomy). It can be set up as it is in this template:

- Knowledge and understanding
- Performance criteria

followed by a description of the conditions under which learning outcomes are achieved and how the results can be assessed.

Distribution theory, practice, self-study

Theory: 40% Practice: 30% Self-studies: 30%

Learning outcomes

- 1. The teacher trainee formulates learning outcomes and chooses
- 2. The teacher trainee describes performance criteria and evidence requirements (assessment) of the learning outcomes

Learning outcome No. 1

1. The teacher trainee formulates learning outcomes and chooses relevant contents, methods and materials

Knowledge and understanding

The teacher trainee must know and understand:

- How a learning programme can be divided into modules, units, and learning outcomes
- How learning outcome can support student centred learning
- The connection between learning outcomes, methods, materials and the students' learning processes
- Subjects, vocational subjects and interdisciplinary planning.
- Pedagogical and didactical planning of modules

Performance criteria

The teacher trainee is able to:

- Formulate learning outcomes
- Choose relevant contents, methods and materials in order to promote the students' learning processes
- Cooperate in teacher teams when it comes to defining learning outcomes and choosing relevant contents, methods, and materials
- Use ICT in the preparation of learning activities

Learning environment

- The faculty offers physical study rooms for the teacher trainees' study groups for the self-study period
- The faculty provides a virtual learning environment
- The faculty offers literature and relevant links when it comes to developing the teacher trainee's knowledge and understanding of learning outcomes and relevant assessment strategies
- The teacher trainee has access to training possibilities at TVET institutions when it comes to training the skills in formulating learning outcomes and choosing relevant assessment

There will be no face-to-face activity in this learning outcome

Learning outcome No. 2

2. The teacher trainee describes performance criteria and evidence requirements (assessment) of the learning outcomes

Knowledge and understanding

The teacher trainee must know and understand:

- How learning outcomes can be evaluated by performance criteria
- How assessment can suppress or support the students' learning processes
- The taxonomy of performance

Performance criteria

The teacher trainee must be able to:

- Use performance criteria in the assessment of learning outcomes
- Distinguish between taxonomic levels of performance

Learning environment

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding
- The faculty offers a learning environment with facilities for group work in connection with project oriented learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also for use in self-study periods
- In the practice part the teacher trainee experiments with putting up framework for learning and enables the students to organise own learning

Assessment

The teacher trainee describes a concrete unit (OSS) in at least two learning outcomes

LEARNING PACKAGE CORRESPONDING TO UNIT 2

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees in relation to this special unit.

The practice part in this unit consists of the teacher trainee's experiments with description of learning outcomes and assessment of performance criteria

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods.

Unit outline

The focus of the unit is how to work with learning outcomes. It will be emphasised that learning outcomes are very important tools for the students' learning. It is an information to the learners on what they are supposed to know, understand, and do after the completion of the unit.

Learning outcomes are divided into following categories:

- Knowledge and understanding
- Skills (performance criteria) both intellectual and practical skills

Learning outcomes

It gives authorities and/or employers a clear picture of what they can expect from a person that has passed the exam



It helps the teacher to plan and carry out what is necessary in order to support students learning





It gives students' a clear picture of what they must know and understand and be able to do after completion of the unit

Working methods

The working methods of the unit will be focused on theories on description and exercises with descriptions of learning outcomes.

Examples of activities

The Dreyfuss brothers have developed a learning model, describing the phases of building competence. In this way, it is possible to see competence development as a process.

The model rests on the fundamental view that competence is developed on the basis of interaction between human beings and the surroundings. The phase model can also be called a taxonomy. According

to the Dreyfuss brothers there are two aspects of an assimilation process: a theoretical (understanding) an a practical (bodily). These two aspects are learned relatively independent of each other.

The model (taxonomy) looks like this:

- Novice, beginner
- Advanced beginner
- Competent practitioner
- Skilled practitioner
- Expert

Example from driving a car:

The novice practices driving a car *in* the car, while the theory lessons take place in a classroom. From the start, the novice spends a lot of energy on the practical issues and the rules and regulations.

The advanced beginner can gradually use his/her practical skills and components from the theory. Gradually they throw light on each other

The competent practitioner can change between driving and theoretical considerations without problems. He/she can give reason for a certain action.

The skilled practitioner knows his/her subject and the relations between practice and theory. This taxonomy level is the optimal for a teacher. The skilled practitioner does not have to be guided or tested regarding his/her knowledge. He/she identifies immediately what has to be done

The expert identifies what has to be done in the action. The action is intuitive and immediate. The theory and skills/ performance have melted together to competence

References

Literature

Hubert and Stuart Dreyfuss (1988) Mind over Machine

Documents

Documents on describing learning outcomes

Documents on taxonomy of performance criteria

Links

Learning outcomes:

http://www.ssdd.bcu.ac.uk/outcomes/

Writing learning outcomes:

http://www.aallnet.org/prodev/outcomes.asp

Learning outcomes and assessment:

http://www.academicprograms.calpoly.edu/assessment/assessplanguide.htm

Recognition of prior learning:

http://www.deakinprime.com/dp/files/VET SM GUI 001 RPL T05.pdf

<u>Unit 3: Facilitating learning – new teacher roles</u>

Guidance/ Description

The teacher trainee develops competence in facilitating learning for students from different TVET sectors, with their different prerequisites and their different competence needs and the necessity of working differently with the learning process.

It will be emphasised that the teacher must have three sorts of competence: 1) interaction with the students (for instance being a facilitator, coach, tutor, mentor, communicator), 2) team work competence (for instance team development of learning activities) and 3) competence to life- long development (continuous development of his/her practical and theoretical competence)

The teacher teamwork is necessary and important for facilitating learning. Therefore, team development is part of this unit.

Distribution between theory, practice and self-studies:

Theory: 35% Practice: 30% Self-study: 35%

Learning outcomes

- The teacher trainee can choose between different teacher roles according to the students and the learning environment
- 2. The teacher trainee facilitates the learning process for the individual student or a group of students
- 3. The teacher trainee chooses and uses appropriate teaching methods and communication forms according to different target groups
- 4. The teacher trainee is able to work in teacher teams

Learning outcome No. 1

 The teacher trainee can choose between different teacher roles according to the students' backgrounds and the learning environment

Knowledge and understanding

- The teacher trainee must know and understand:
- The advantages and challenges of the different teacher roles
- The different teacher roles in the learning environment (for instance classroom, workshop, resource-based learning centres, simulation environment) and the purpose of different learning rooms
- Theories and understanding of the teacher roles when focus is on the students' learning process

• The teachers' competence on three levels

Performance criteria

The teacher trainee must be able to:

• Perform in different teacher roles according to the learning environment, - in the classroom, in the workshop, in resource based learning centres, in simulation environment)

Learning environment

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study period
- In the practice part the teacher trainee has access to training possibilities at TVET institutions when it comes to development of different teacher roles

Learning outcome No. 2

 The teacher trainee facilitates the learning process for the individual student or a groups of students

Knowledge and understanding

The teacher trainee knows and understands:

- The importance of motivation
- Theories on person centred learning
- Development psychology in relation to young people and adults
- Pedagogical anthropology in relation to learning and learning environment
- Multicultural aspects in the learning process

Performance criteria

The teacher trainee is able to:

- Create a motivating atmosphere
- Can communicate and give feedback
- Skills in creating an inclusive learning environment
- Make the learning outcomes clear for the individual student and for groups of students
- Can perform a learning dialogue with a starting point in the students' learning process

Learning environment

- The faculty offers lessons and exercises in order to develop the teacher trainee's knowledge and understanding
- The faculty offers a learning environment with examples of how to facilitate learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study period
- In the practice part the teacher trainee has access to training possibilities at TVET institutions when it comes to development of competence in facilitating learning

Learning outcome No. 3

The teacher trainee chooses and uses appropriate teaching methods and communication forms according to different target groups

Knowledge and understanding

The teacher trainee knows and understands:

- Theories on experiential learning
- The difference between teaching and learning
- Motivation and group psychology.
- How teaching methods affects the learning processes and the learning outcome
- The importance of making pedagogical choices and being able to change between different learning strategies when the focus is learning
- ICT supported learning

Performance criteria

The teacher trainee is able to:

- Use student-centred methods of effective enhanced learning according to preferred learning style
- Analyse the effect of pedagogical choices and learning activities when it comes to the students' learning processes
- Use ICT material for his/her presentation

Learning environment

- The faculty offers lessons and exercises in order to develop the teacher trainee's knowledge and understanding.
- The faculty provides a motivating learning environment (preferably as an example of best practice) as well with regard to a physical as a virtual learning environment
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Learning outcome No. 4

The teacher trainee is able to work in teacher teams

Knowledge and understanding

The teacher trainee knows and understands:

- The necessity of team work
- The teachers' common tasks with regard to institution-based planning, preparation and assessment and other things
- Team reflection methods, such as reflective teams, etc.

Performance criteria

The teacher trainee is able to:

- Work in teams
- · Make and take part in effective meetings
- Perform common preparation
- Use reflecting methods, such as reflecting teams, etc

Learning environment

- The faculty offers exercises in order develop the teacher trainee's knowledge and understanding
- The faculty offers a learning environment with possibilities of group work
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in self-study periods.
- In the practice part the teacher trainee has access to training possibilities at TVET institutions

Assessment

The teacher trainee (preferably in teams) delivers an interdisciplinary learning activity together with other teacher trainees. The considerations in this regard (concerning the students' learning processes, the learning outcomes, the teacher role, the cooperation of the teacher team) will be evaluated at meeting between the teacher trainee, the master trainer and, preferably, the principal of the TVET institution.

The teacher trainee must provide evidence through portfolios that he/she can reflect on his/her experience with facilitating learning

LEARNING PACKAGE CORRESPONDING TO UNIT 3

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

Unit outline

The teacher trainee develops competence in facilitating learning for students from different TVET sectors, with their different prerequisites and their different competence needs and the necessity of working differently with the learning process.

It will be emphasised that the teacher must have three sorts of competence: 1) interaction with the students (for instance being a facilitator, coach, tutor, mentor, communicator), 2) team work competence

(for instance team development of learning activities) and 3) competence to life-long development (continuous development of his/her practical and theoretical competence)

The teacher teamwork is necessary and important for facilitating learning. Therefore, team development is part of this unit.

Working methods

The working methods may be exercises using the classroom as a sort of laboratory. The exercises have focus on clarification of the student's learning aims and objectives.

The contents of the self-studies are focused on reading of literature, observations in practice and descriptions of relevant problems within the unit and in relation to own practice.

Relevant working methods of the practice part are study groups, experiments in own practice, observation of other's practice, visits to other institutions, documentation of own learning processes and self-assessment.

Examples of activities in the unit

Try to choose the role as a "facilitator" meaning that you are supposed to help students to achieve THEIR goals and objectives. This means of course that the lesson must be organised so that students actually are encouraged to set goals, and to work on the achievement, supported by you. Try to reflect on what you are doing when you do it (reflection in action), and to reflect on the actions you took during the process (reflection on action. Make up your mind as to what you will change in order to it even better next time. Try it – and so on.

You can also choose something else – all you do will give experience itself. After experience, reflect on the experience in order to find out what happened, what went wrong, what was good, why it happened and what should be changed till next time. Reflection should take place in action (when you actually work on things) and on action (after you have finished and is at a distance from what happened.

Write about your reflection in the portfolio.

The role of the teacher depends on the purpose (including what competence should be improved), and under which conditions it all takes place.

The teacher must therefore organise the learning environment in accordance with what is wanted and needed. It could look like this:

Different rooms for different purposes

The teacher teaches	The teacher organises and supports reflection	
Teacher's room: • Traditional teaching • Teacher decides	Simulation room • Students learn from experience • Environment must look like the real world	
Study-room • Room for learning • Students decide	Practice room Students learn from the real practice Environment must be for learning	
The teacher is guiding and supporting students if they need it	The teacher ensures that activities are good at learning from and organises reflection	

The whole thing could be organised as a Resource based learning centre where the environment is organised in order to support students learning by using resources and facilities of different kinds. It could be teachers, tutors/advisers, equipment from a simulated environment and/or from a real workshop.

In all groups of students there will be different learning styles represented. Some students like to learn from theory, some from practice, others like to learn from reflection on experience - and finally will some students prefer to learn from doing experiments. They are all in the same group, and the teacher, therefore, must ensure that students get the opportunity to learn in accordance with their preferred learning style – or if needed that they learn that it is possible to learn in different ways.

That is one important reason why the learning environment must be based on learning processes not on teaching. Only the students who like to learn from theory will "get value for money" under traditional teaching conditions.

References

Literature

Hargreaves, Andy (1994) Changing Teachers, Changing Times. New York: Teachers College Press

Schon, Donald, A. (1995) The Reflective Practitioner: How Professionals Think in Action Ashgate Publishing

Schwarz, Roger (2003) The Skilled Facilitator. San Francisco: Jossey-Bass

Zachary, Lois J. (2000) *The Mentor's Guide: Facilitating Effective Learning Relationships*. San Francisco: Jossev-Bass

Buckley, Roger and Caple, Jim, The Theory and Practice of Training, Kogan Page, 2000

Brookfield, S. D. Developing critical thinkers. San Francisco: Jossey-Bass, 1988.

Cervero, R. M. Effective continuing education for professionals. San Francisco: Jossey-Bass, 1988.

Imel, S. Teaching adults: is it different? Eric Digest No. 82. Columbus: ERIC Clearinghouse on Adult,

Career, and Vocational Education, 1989. (ED 305 495).

Kottkamp, R. B. "Means for Facilitating Reflection." Education And Urban Society 22, no. 2 (February 1990): 182-203.

Lasley, T. "Editorial." Journal Of Teacher Education 40, no. 2 (March-April 1989): n.p.

Mezirow, J., ed. Fostering Critical Reflection In Adulthood. San Francisco: Jossey-Bass, 1990.

Peters, J. "Strategies for Reflective Practice." In *Professional Development For Master trainers Of Adults.*New Directions

For Adult And Continuing Education, no. 51, edited by R. Brockett. San Francisco: Jossey-Bass, Fall 1991.

Rose, A. "Framing Our Experience: Research Notes on Reflective Practice." *Adult Learning* 3, no. 4 (January 1992): 5.

Roth, R. A. "Preparing the Reflective Practitioner: Transforming the Apprentice through the Dialectic." *Journal Of Teacher Education 40*, no. 2 (March-April 1989): 31-35.

Schon, D. Educating The Reflective Practitioner. San Francisco: Jossey-Bass, 1988.

Documents

Links

<u>Schön - Educating the reflective practitioner</u>. Address to the 1987 meeting of the American Educational Research Association.

Experiential learning: https://www.lsneducation.org.uk/user/order.aspx?code=072762&src=XOWEB produced by Learning and Skills Network (2007

Recognition of prior learning:

http://www.deakinprime.com/dp/files/VET_SM_GUI_001_RPL_T05.pdf

Teacher roles in the classroom:

http://www.huntington.edu/education/lessonplanning/roles.html

Handbook on teacher roles and responsibilities (example):

http://www.dowling.edu/mydowling/forms/stu/sthandbook.pdf

Teacher's role in problem-based learning:

http://www.mcli.dist.maricopa.edu/pbl/ubuytutor/role.html

Unit 4: Present and future competence needs within the vocational education

Guidance/ Description

The focus of the unit is identifying present and future competence needs seen in view of sociological and pedagogical philosophical theories. The present education programmes and vocational pedagogy will be put into perspective in the light of these theories. The teacher trainee will be able to use the knowledge in his/her future planning, implementation and assessment of his/her own teaching.

Special emphasis is put on global measures in TVET such as life-long learning, innovation and entrepreneurship, and internationalisation

Distribution theory, practice, self-study

Theory: 40% Practice: 20% Self-studies: 40%

Learning outcomes

- 1 The teacher trainee identifies the present and future competence needs within the vocational education
- 2 The teacher trainee uses the concepts of competence and qualification in an independent analyses/project
- 3 The teacher trainee contributes to networking between institution and trade and industry

Learning outcome No. 1

The teacher trainee identifies the present and future competence needs within the vocational education and plan a course in this context.

Knowledge and understanding

The teacher trainee knows and understands:

- The concepts of competence and qualification from a sociological, pedagogical, philosophical and a historic perspective
- The development of the labour market and the society.
- The influences on the objectives, the content, and the pedagogical design
- The interaction between the education in the TVET institution and the training in the company
- The special cultural customs in vocational education
- Overall global trends and the significance for the society and for the individuals (such as life-long learning, internationalisation, innovation and entrepreneurship)
- The concepts of life-long learning and competence development

Performance criteria

The teacher trainee is able to:

- Identify values, norms, culture and competence development in his/her own trade
- Analyse development tendencies in the TVET sector
- Transform competence needs into learning activities
- Perform a training needs analysis

Learning environment

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding
- The faculty offers a learning environment with facilities for group work in connection with project oriented learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also for use in self-study periods
- In the practice part the teacher trainee visits external partners (social partners, representatives of local trade and industry in order to get empirical data

Learning outcome No. 2

The teacher trainee uses the concepts of competence and qualification in an independent analyses/project

Knowledge and understanding

The teacher trainee knows and understands:

 The concepts of competence and qualification from a sociological, pedagogical philosophical and a historic perspective

Performance criteria

The teacher trainee is able to:

- Analyse competence needs in the TVET sector
- Collect and analyse empirical data
- Write an analysis in a project report
- Work project orientated in teams

Learning environment

- The faculty offers a learning environment with facilities for group work in connection with project oriented learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also for use in self-study periods
- In the practice part the teacher trainee visits external partners (social partners, representatives of local trade and industry in order to get empirical data

Learning outcome No. 3

The teacher trainee contributes to networking between institutions and trade and industry

Knowledge and understanding

The teacher trainee knows and understands:

- How to make arrangements with organisations in the world of work that can give benefit to both organisations and students
- How to learn from the real practice and to turn experience to explicit knowledge and a broad understanding of the workings of the economy, and the opportunities and challenges facing an employer or organisation.

Performance criteria

The teacher trainee is able to:

- Establish contacts (and contracts) with organisations about students' learning from the real practice
- Organise students' work so that they get the opportunity to judge and identify own strengths and weaknesses, and to assess and take risks as and when warranted
- Encourage students to take initiative, to be pro-active and independent

Learning environment

- The faculty offers a learning environment with facilities for group work in connection with project oriented learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also for use in self-study periods
- In the practice part the teacher trainee visits external partners (social partners, representatives of local trade and industry in order to get empirical data

Assessment

The teacher trainee makes an analysis of the competence needs within the vocational education. This analysis contains as well use of relevant theories as of empirical data. The analysis is written in a project report (not more than 10 pages)

LEARNING PACKAGE CORRESPONDING TO UNIT 4

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The practice part in this unit consists of the teacher trainee's visits to external partners (social partners, representatives of local trade and industry) in order to get empirical data

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees in relation to this special unit.

The unit is project oriented. That means that the teacher trainees' must have access to group facilities and that the teacher master trainer will be functioning as facilitator for the teacher trainees.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

Unit outline

This unit has focus on theories on culture, competence and qualifications in vocational pedagogy seen from a sociological and philosophical pedagogical point of view. Focus is on the relations between institution and trade/industry, the reforms in the TVET sector, and overall global trends.

The contents of the practice will be the teacher trainee's independent empirical research for relevant data (questionnaires, interviews, surveys). The focus is on competence development in vocational education and reflections on how to achieve the needed competences.

The teacher trainee must relate to development tendencies within his/her own vocational area as well as to the complete vocational area and be able to analyse how the tendencies manifest themselves itself in the education and the aims of the programmes.

The teacher trainee should be able to use ICT in identifying basic trends and needs of the labour market.

Working methods

The assessment of this unit will rest on an independent project report (possibly performed in teams). Therefore, this unit is built up as a project work with following phases:

- 1. Introduction (face-to-face) in the theory part
- 2. The choice of a problem (self-study part with the teacher master trainer as facilitator)
- 3. The formulation of the problem (self-study part)
- 4. The planning (self-study)
- 5. The implementation (self-study and practice)
- 6. The production (self-study)
- 7. Evaluation and assessment (face-to-face)

The teacher trainee must be able to give reasons for his/her own practice and connect it with fundamental pedagogical views and values.

Evidence gathered from practice, i.e. natural performance, would be the primary method of assessing the trainee's competence although a variety of other methods may be used either to supplement this or to provide evidence across the full range of performance criteria. The following forms of evidence would be appropriate to this unit:

- Documentation, i.e. statistics, reports, analysis of competence needs in the relevant vocational trade
- Interviews with relevant stakeholders and social partners within the trade
- Questionnaires for relevant stakeholders and social partners
- The teacher trainee's own description of his/her performance written or oral in a portfolio.

Examples of activities

To uncover learning needs. Learning needs analyses (LNA) – Some inputs concerning how to work with LNA

There is huge number of approaches and theories on how to identify/uncover/describe learning/training needs, both applied to the world of work and the world of education. In the following, some of the most important phases in a training needs' analysis will be outlined. Some of the steps are not directly or closely linked to the TVET students' situation. They have been included to show the whole context of a training need's analyses and to provide inputs for a discussion concerning TVET students' learning needs as highlighted in the outcomes for this unit.

First step is in a LNA is to perform a gap analyses. These most often have two parts:

- 1. The current situation: To determine the current state of skills, knowledge and competences of the students you are responsible for.
- 2. Desired or necessary situation: It will be important to identify the desired or necessary standards in terms of skills, knowledge and abilities to accomplish these successfully.

Next step in LNA is to consider different tasks to be included in the LNA:

- Review the current course
- Analyse the students
- Analyse the subject domain
- Analyse the learning outcomes
- Analyse the teaching/learning activities
- Analyse the constraints and resources
- Analyse the assessment methods needed

Analyse the students can involve the following issues

- Their relevant knowledge and skills?
- How varied are they in knowledge and learning styles
- How well can they learn?
- How are their motivation and interests, attitudes to teaching/learning methods?
- Are there obstacles to their learning, such as anxiety/colour blindness, lack of concentration, computer access?

Some basic needs assessment techniques to be used in combination

- Direct observation
- Questionnaires
- Consultation with persons in key positions, and/or with specific knowledge
- Review of relevant literature
- Interviews
- Focus groups
- Tests
- Records & report studies
- Works samples

Last step in LNA

Identify solutions to problems encountered during the LNA and propose possible interventions.

References

Literature

Boud, David & Grahame Feletti (1998) The Challenge of Problem-based Learning. London: Kogan Page

Documents

Links

Fostering entrepreneurial mindsets trough education and learning: http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/com/2006/com2006 0033en01.pdf Europen (non-profit association) for Practice Firms):

http://www.europen.info/englisch/index.html

Entrepreneurship (Wikipedia):

http://en.wikipedia.org/wiki/Entrepreneurship

Education and Training for Entrepreneurship:

http://ec.europa.eu/enterprise/entrepreneurship/support measures/training education/index.htm

Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning:

http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/I 394/I 39420061230en00100018.pdf

Work-related Learning and Enterprise:

http://www.dfes.gov.uk/14-19/index.cfm?sid=37&pid=314&ctype=TEXT&ptype=Single

Experiential learning: https://www.lsneducation.org.uk/user/order.aspx?code=072762&src=XOWEB produced by Learning and Skills Network (2007

Key Competences:

http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/I 394/I 39420061230en00100018.pdf

Problem-based learning:

http://www.udel.edu/pbl/

Unit 5: Pedagogical framework of TVET programmes

Guidance/ Description

The teacher trainee develops his/her competence in planning a TVET course taking into account the qualification and competence needs of the labour market and the students, the latter seen as members of a youth/adult culture in a modern society.

The purpose of the unit is to be able to create a suitable pedagogical framework for development of relevant competences for the students as future members of the labour market – and the youth/adult culture in a modern society - if possible, blended learning is included in the plan

Special emphasis is put on including global measures into the TVET courses, especially innovation and entrepreneurship

Entrepreneurship competence refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance

Distribution theory, practice and self-study

Theory: 20% Practice: 20% Self-study: 60%

Learning outcomes

- The teacher trainee develops and plans a course taking into account the competence needs of the trade and the youth/adult culture in a modern society, if possible, blended learning is included in the plan
- 2. The teacher trainee includes aspects (content, working methods, etc.) of innovation and entrepreneurship in his/her teaching

Learning outcome No. 1

The teacher trainee develops and plans a course taking into account the competence needs of the trade and the youth/adult culture in a modern society; if possible, blended leaning is included in the plan

Knowledge and understanding

The teacher trainee must know and understand:

- The legislative framework for vocational education
- Pedagogical practice and theory within youth and adult education in TVET institutions
- A modular competence-based approach to development of courses
- Models for planning
- Didactical models
- · E-learning and blended learning
- How to work with interdisciplinary and cross curricula activities
- Principles of project work

Performance criteria

The teacher trainee must be able to:

- Include interaction between institution and the world of work when planning a course
- Teach in the modular competence-based approach
- Set up learning outcomes and evidence requirements
- Use blended learning models as a means of improving the quality of the students' learning
- Choose together with students the activities for project work
- Analyse systematically and identify possible problems and challenges with the chosen concept and change if necessary
- Evaluate and adjust the process continuously

Learning environment

- The faculty offers a learning environment with facilities for group work in connection with project oriented learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also for the self-study periods
- In the practice part, the teacher trainee visits vocational institutions in order to gain experience with different types of courses, including courses with blended learning. If possible the teacher trainees visit institutions with entrepreneurship simulation programmes

Learning outcome No. 2

The teacher trainee includes aspects (content, working methods, etc.) of innovation and entrepreneurship in his/her teaching

Knowledge and understanding

- Knowledge and understanding of the importance of including innovation and entrepreneurship in TVET
- Knowledge and understanding of learning environment improving the students' skills in innovation and entrepreneurship
- Knowledge of the concepts of simulation programmes such as SIMU, Young Enterprise, etc.

Performance criteria

 Skills in creating learning activities including simulation programmes such as SIMU, Young Enterprise, etc.

Learning environment

- The faculty offers a learning environment with facilities for group work in connection with project oriented learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio, also for use in the self-study period
- In the practice part, the teacher trainee visits vocational institutions in order to gain experience with different types of courses, including courses with blended learning. If possible the teacher trainees visit institutions with entrepreneurship simulation programmes

Assessment

The teacher trainee plans a TVET course to demonstrate that he/she can use the theories on youth/adult culture, competence development, the interaction between institution and trade/industry, and the concepts of innovation and entrepreneurship, and, if possible, blended learning models.

The course might be developed by a team of teacher trainees. Each teacher trainee must be able to argue for the choices and priorities made in the planning of the course.

The course must be presented for the peers and evaluated by peers and the teacher master trainer. The length of the course must be between one and five days

LEARNING PACKAGE CORRESPONDING TO UNIT 5

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The practice part in this unit consists of the teacher trainee's visits to external partners (social partners, representatives of local trade and industry in order to get empirical data

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit is project oriented. That means that the teacher trainees' must have access to group facilities and that the teacher master trainer will be functioning as facilitator for the teacher trainees.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer and the mentor to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be it cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

Unit outline

The contents are theories and empirical surveys within the youth and adult area including life circle theories, sociology, and anthropology and culture analyses. Special emphasis is put on youth and adult culture in TVET.

Furthermore the contents are different sorts of programmes in TVET – with different learning outcomes, contents, culture and pedagogical practice. The concept of lifelong learning, innovation and entrepreneurship, blended learning and other national and international tendencies with regard to organisation of learning are all part of this unit.

The contents of the practice are the teacher trainees' own planning and the context and learning environment. The focus is on competence development in vocational education and reflections on how to achieve the needed competences. The teacher trainee must be able to give reasons for his/her own practice and connect it with fundamental pedagogical views and values.

The teacher trainee must relate to development tendencies within his/her own vocational area as well as to the complete vocational area in the development of the small course.

Working methods

In this unit, the teacher trainees preferably work in teams. The team develops and plans the course together. The working methods of this unit are based on the active involvement of the teacher trainees.

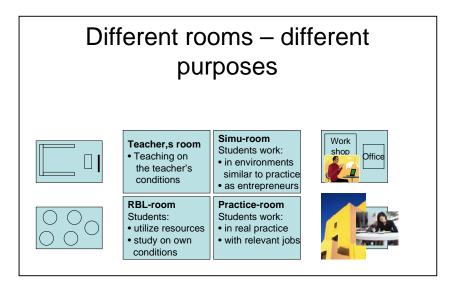
The course must be presented for the peers – and assessed by peers.

Evidence gathered from practice, i.e. natural performance, would be the primary method of assessing the trainee's competence although a variety of other methods may be used either to supplement this or to provide evidence across the full range of performance criteria. The following forms of evidence would be appropriate to this unit:

- Documentation, i.e. course and lesson plans, information/support materials, assessment plans, assessments.
- Peer assessment by the other teacher trainees or by the teacher master trainer delivering a TVET course
- The teacher trainee's own description of his/her performance in a portfolio
- Analysis of participants' prerequisites, TVET framework and competence need

Examples of activities

In order to ensure that students acquire the Entrepreneurship Competence students must work problem-based and with activities that give them a competence to formulate problems, solve problems, cooperate, seek information, use and share information with peers, analyse and synthesize and present results – especially in situations where ideas can be turned into action. The work can be done in the different learning environments:



RBL= Resource Based Learning

Part of the whole organisation is to convince students about the value of working in that way – and with focus on entrepreneurship. Not all students will be starting new businesses but they will all need competences like creativity, innovation, planning and managing projects in their working life or private.

Another part is that the teacher is a facilitator for students' learning processes, and that includes:

- An eye on the learning outcomes
- Cooperation with providers of simulated environments and with real companies
- Encouragement in relation to students' "turning ideas into action"
- Students' cooperation with peers
- Organisation of the necessary reflection processes
- Continuous assessment of the whole process and intervention if necessary

The teacher will learn to work with the improvement of students' entrepreneurship competences by organising learning environments like the above mentioned. This will, as mentioned above, imply contact and cooperation with some relevant companies where students can try things in a real practice.

It can be done in phases where students start using different techniques for creation of new ideas (like brainstorming) in relation to more ordinary teaching activities, and/or students are encouraged to visit real companies to get an idea of the world of work.

References

Literature

Boud, David & Grahame Feletti (1998) The Challenge of Problem-based Learning. London: Kogan Page

Documents

Links

Project-based learning: http://www.sun-associates.com/lynn/pbl/pbl.html

Problem-based learning: http://www3.uakron.edu/edfound/people/savery/papers/sav-duff.html

Flexible learning:

http://www.dest.gov.au/sectors/training_skills/policy_issues_reviews/key_issues/nts/dap/flexible_learning_shtm

Fostering entrepreneurial mindsets trough education and learning:

http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/com/2006/com2006 0033en01.pdf

A Quick Guide to Practice Firms:

http://community.flexiblelearning.net.au/TeachingTrainingLearners/content/article 6081.htm

Europen (non-profit association) for Practice Firms):

http://www.europen.info/englisch/index.html

Entrepreneurship (Wikipedia):

http://en.wikipedia.org/wiki/Entrepreneurship

Education and Training for Entrepreneurship:

http://ec.europa.eu/enterprise/entrepreneurship/support measures/training education/index.htm

Entrepreneurship Learning (ETF):

 $\frac{\text{http://www.etf.europa.eu/web.nsf/0b48b8b071a6e703c12570c1002fa98d/9bfa36c15e374171c12572f400}{447c66/\$FILE/IPA07-04\%20+\%20ENPI07-02\%20Cross-regional\%20Entrepreneurship\%20Learning.pdf}$

Work-related Learning and Enterprise:

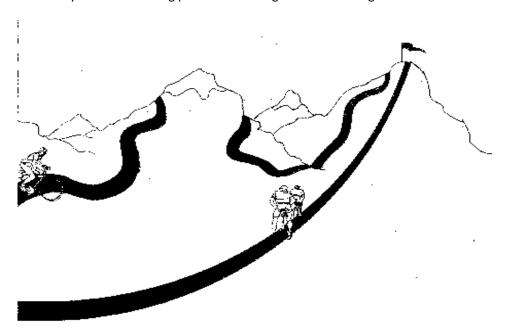
http://www.dfes.gov.uk/14-19/index.cfm?sid=37&pid=314&ctype=TEXT&ptype=Single

Experiential learning: https://www.lsneducation.org.uk/user/order.aspx?code=072762&src=XOWEB produced by Learning and Skills Network (2007

<u>Unit 6: Different students – different learning needs</u>

Guidance/Description

The teacher trainee develops competence in understanding students from different TVET sectors, with their various potentials, learning styles, and their different competence needs and the necessity of working differently with the learning process according to this knowledge.



Distribution theory, practice, self-studies

Theory: 30% Practice: 35% Self-studies: 35%

Learning outcomes

- 1. The teacher trainee identifies the learning need and describes the learning style of the young student
- 2. The teacher trainee identifies the learning need and describes the learning style of a gifted student
- 3. the teacher trainee develops his/her intercultural and multicultural competence

Learning outcome No. 1

The teacher trainee identifies the learning need and describes the learning style of the young student and adult students

Knowledge and understanding

The teacher trainee knows and understands:

- The different students' prerequisites, ambitions and development needs psychologically, sociologically, culturally, and ethnically
- Pedagogical anthropology in relation to learning, learning environment and participants

- Theories on learning, learning styles and multiple intelligence
- The formation of identity and group membership in connection with cultural and economical conditions and development of society
- · Multicultural teaching and learning

Performance criteria

The teacher trainee is able to:

- Use observation techniques
- Use interview techniques
- Suggest learning strategies for individual students or groups of students

Learning environment

- The faculty offers facilitators in order to develop the teacher trainee's knowledge and understanding of individual students
- The faculty offers a learning environment with possibilities for group work
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods
- In the practice part, the teacher trainee has access to students at TVET institutions when it comes to interviews and observations of students.

Learning outcome No. 2

The teacher trainee identifies the learning need and describes the learning style of a gifted student

Knowledge and understanding

The teacher trainee knows and understands:

- The gifted students' prerequisites, ambitions and development needs psychologically, sociologically, culturally, and ethnically
- Theories on learning, learning styles and multiple intelligence
- The formation of identity and group membership

Performance criteria

The teacher trainee is able to:

- Use observation techniques
- Use interview techniques
- Suggest learning strategies for individual students or groups of students

Learning environment

- The faculty offers facilitators in order to develop the teacher trainee's knowledge and understanding of especially gifted students
- The faculty offers a learning environment with possibilities for group work
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods
- In the practice part the teacher trainee has access to students at TVET institutions when it comes interviews and observations of gifted students

Learning outcome No. 3

The teacher trainee develops his/her intercultural and multicultural competence

Knowledge and understanding

The teacher trainee knows and understands:

- Ethnic students' prerequisites, ambitions and development needs psychologically, sociologically, culturally, and ethnically
- Theories on learning, learning styles and multiple intelligence
- How to take advantage of ethnic differences between the students in order to improve learning and intercultural competence
- Multicultural teaching and learning

Performance criteria

The teacher trainee is able to

- Use intercultural teaching methods
- Use observation techniques
- Use interview techniques
- Suggest learning strategies for classes with students from different ethnic groups

Learning environment

- The faculty offers facilitators in order to develop the teacher trainee's knowledge and understanding of especially gifted students
- The faculty offers a learning environment with possibilities for group work
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods
- In the practice part the teacher trainee has access to students at TVET institutions when it comes interviews and observations of gifted students

Assessment

The teacher trainee develops a case based on observation of students and interviews with students. In the case story, at least two or three students must be described.

The teacher trainee must provide evidence through portfolios to demonstrate that he/she can reflect on the importance of taking into account the different students and their different needs.

LEARNING PACKAGE CORRESPONDING TO UNIT 6

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The practice part in this unit consists of the teacher trainee's visits external partners (social partners, representatives of local trade and industry in order to get empirical data

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

Unit outline

The content is development psychology, learning styles, anthropology, with focus on the interaction between teacher and student and between students mutually. Another issue in this unit is vocational pedagogical theory and practice and the demands and expectations of enhanced individualisation and differentiation.

In the practice part there will be is experiments with observation and interviews with individual students, and description of different learning strategies for different students.

Working methods

The working methods may be observation exercises using the classroom as a laboratory. The observations have focus on interaction in the classroom in the light of students' different learning styles. Furthermore, the teacher trainees will be trained in interview techniques.

The self-study is focused on reading of literature, reflections on practice and descriptions of relevant individual students with regard to preferred learning style, interaction with other students, and proposed learning strategy problems within the unit and in relation to own practice.

Relevant working methods of practice part are observation of students and interviews with students.

Evidence gathered from practice, i.e. natural performance, would be the primary method of assessing the teacher trainee's competence although a variety of other methods may be used either to supplement this or to provide evidence across the full range of performance criteria. The following forms of evidence would be appropriate to this unit:

- Cases produced by the teacher trainee illustrating key issues with regard to the students' different learning styles and learning strategies based on observations and interviews
- Observations, reflecting teams using the classroom as a laboratory
- The teacher trainee's own description of his/her performance in a portfolio

Examples of activity

In order to test your learning style use following test:

http://www.bookrags.com/Learning styles?gclid=CK7956udhI8CFQ9SZwodnBiMvg http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Learning Styles.html

There are many more examples to be found on the internet.

After having found out whether you are reflectionist, theorist, activist or pracmatist try out following exercise:

Test your learning style – exercise Objectives

- To gain insight in your own preferred learning style
- To gain competence in using different methods and means according to the learning style of the students.
- To test one test and discuss its relevance

1) Fill out the test individually

2) Group work in 4 groups (the activists together, the pragmatist etc.)

Create the ideal TVET institution when it comes to learning You can make a drawing, a model, a description ... or ???? Time limit:_____ minutes

3) Plenum: Present your ideal TVET institution to the rest of the group (max. 10 min. pr. Group)

4) Reflection:

- How do you characterize yourselves compared to the other types?
- How do you learn the best? Are there any certain activities you prefer more than others?
- When do you learn the least?
- If you were to compose the optimal working group how would you prefer it according to the four types?

References

Literature

Armstrong, Thomas Multiple Intelligences in the Classroom

Documents

Links

Learning styles: http://www.bookrags.com/Learning styles?gclid=CK7956udhl8CFQ9SZwodnBiMvg http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Learning Styles.html

There are many more examples to be found on the internet.

Download this document from Learning and Skills Network:

https://www.lsneducation.org.uk/user/order.aspx?code=041543&src=XOWEB

Multiple intelligences:

http://www.thomasarmstrong.com/multiple_intelligences.htm

http://www.cortland.edu/psych/mi/measure.html

http://www.uwsp.edu/education/lwilson/LEARNING/3mides.htm

http://www.newhorizons.org/strategies/mi/front mi.htm

Unit 7: Adult learners in TVET

Guidance/ Description

The teacher trainee develops competence in understanding adult students from different TVET sectors, with their different potentials, learning styles, and their different competence needs and the necessity of working differently with the learning process according to this knowledge.

Distribution theory, practice, self-studies

Theory: 30% Practice: 35% Self-studies: 35%

Learning outcomes

The teacher trainee identifies the learning need and describes the learning style of the adult student

Learning outcome No. 1

The teacher trainee identifies the learning need and describes the learning style of the adult students

Knowledge and understanding

The teacher trainee knows and understands:

- Knowledge and understanding of the complexity of the adult learner' prerequisites, ambitions and development needs - psychologically, sociologically, culturally, and ethnically
- Knowledge and understanding of the formation of identity in connection with cultural and economical conditions and development of society
- Knowledge of the concept of life-long learning

Performance criteria

The teacher trainee is able to:

- Skills in analysing different positions and interests and estimate possibilities for development
- Skills in gathering empiric data, such as interview techniques and techniques regarding questionnaires and surveys
- Skills in developing a learning environment for adult students

Learning environment

- The faculty offers lessons and exercises in order to develop the teacher trainee's knowledge and understanding of adult students
- The faculty offers a learning environment with possibilities for group work
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate,
 and for the teacher trainee's portfolio also in self-study periods
- In the practice part the teacher trainee has access to students at TVET institutions when it comes interviews and observations

Assessment

The teacher trainee analyses a learning situation regarding adult learners in TVET. The analysis is based on empiric data and includes the teacher trainee's own considerations regarding life-long learning

The teacher trainee must provide evidence through portfolios to demonstrate that he/she can reflect on the important aspects of adult learners in TVET.

LEARNING PACKAGE CORRESPONDING TO UNIT 7

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The practice part in this unit consists of interviews with adult learners and stakeholders.

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit is project oriented. That means that the teacher trainees' must have access to group facilities and that the teacher master trainer will be functioning as facilitator for the teacher trainees.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods.

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

Unit outline

The content is focused on adult pedagogy and sociology and global trends regarding life-long learning.

Working methods

The working methods are concerned with interpreting analyses, empiric data, and relating these to own practice

The self-study is focused on reading of literature, observations in practice and descriptions of relevant problems within the unit and in relation to own practice.

Relevant working methods of practice part are discussions in study groups, experiment in own practice, interviews with adult learners and stakeholders.

Evidence gathered from practice, i.e. natural performance, would be the primary method of assessing the trainee's competence although a variety of other methods may be used either to supplement this or to provide evidence across the full range of performance criteria. The following forms of evidence would be appropriate to this unit:

- Documentation, i.e. interviews with adult learners and stakeholders
- Cases produced by the teacher trainee illustrating key issues of the unit
- The teacher trainee's own description of his/her reflections in a portfolio

Examples of activity

Adult learners are different from young students

It is very important for adult learners that they see a purpose of the learning. It might be:

- Development of 'action competencies
 - professional orientation
 - action potentials, action preparedness
- Capacity for coping with demands ('resistance' ability)
 - broad understanding, knowledge of contemporary society
 - competence to make choice
 - reflection, reflexivity (society perspective)
 - collaboration the 'collective conscious' (as opposed to Jung)

Adult learners' attitude to learning:

- selective guided by the preconditions and needs of the individual
- must be meaningful (motivation based on direct interest)
- often ambivalent
- must be based on one's own choice

Teachers and trainers in adult learning must **actively** avoid to take on the responsibility for learning — which (a bit paradoxically) means that they must take on the responsibility to <u>return</u> the responsibility for learning "back" to participants

The fact that adult learners take responsibility for their own learning does not in any way mean less responsibility for the teachers and trainers within adult education and learning arrangements. On the contrary, it is probably more demanding in all the many daily pedagogical situations to have to reflect on what should be the adult learners' own responsibility and what should be the responsibility of the system and of the teacher/trainer

- What is adult learning participants' own responsibility in your countries?
- What is the responsibility of teachers and trainers?
- The teacher in adult learning arrangements
 - no role is "the right one"
 - important to be authentic (role model)
 - commitment to continuous development in relation to professional and personal competencies and to the needs of adult learners
- Safety and challenge
 - learning in formalized education: safe room (for experiments and failures
 - NDZO (nearest development zone)
- Activity
- participants' goal oriented actively and engaged, if learning is to take place
- Community and individuality
 - community at class level important for learning environment (community of practitioners)

- community at group level important to achieve collaborative skills
- many adult learners profit from learning on their own
- Reflection and reflexivity
 - time and space for reflections on own learning
- Control and assessment
 - at the end of course: a societal necessity
 - influences the organisation and sequences of the adult learning programme

Group work on pedagogical practice in adult learning

1. round:

- How would you describe the pedagogical practise in adult education in your countries?
 - How is the institution culture/learning environment?
 - What is the responsibility of participants?
 - What are the responsibilities of teachers, trainers and institution leaders?
 - Which teaching methods are normally used?

2. round:

- How would you propose to develop the pedagogical adult learning practise in your TVET institution?
 - Who should have the responsibility for the pedagogical practise?
 - How could teachers and trainers contribute to improve learning organisation and environments?
 - What could teacher master trainers (faculties) do to upgrade teacher and trainer skills in adult learning?
 - How could national ministries stimulate innovative adult learning arrangements?

References

Literature

Boud, David & Grahame Feletti (1998) The Challenge of Problem-based Learning. London: Kogan Page

Schon, Donald, A. (1995) The Reflective Practitioner: How Professionals Think in Action Ashgate Publishing

Buckley, Roger and Caple, Jim, The Theory and Practice of Training, Kogan Page, 2000

Brookfield, S. D. Developing critical thinkers. San Francisco: Jossey-Bass, 1988.

Cervero, R. M. "Becoming More Effective in Everyday Practice." *in fulfilling the promise of adult and Continuing education. New directions for continuing education*, no. 44, edited by B. A. Quigley. San Francisco: Jossey-Bass, Winter 1989.

Cervero, R. M. Effective continuing education for professionals. San Francisco: Jossey-Bass, 1988.

Imel, S. *Teaching adults: is it different?* Eric Digest No. 82. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, 1989. (ED 305 495).

Kottkamp, R. B. "Means for Facilitating Reflection." Education And Urban Society 22, no. 2 (February 1990):

182-203.

Lasley, T. "Editorial." Journal Of Teacher Education 40, no. 2 (March-April 1989): n.p.

Mezirow, J., ed. Fostering Critical Reflection In Adulthood. San Francisco: Jossey-Bass, 1990.

Peters, J. "Strategies for Reflective Practice." In

Professional Development For Master trainers Of Adults. New Directions

For Adult And Continuing Education, no. 51, edited by R. Brockett. San Francisco: Jossey-Bass, Fall 1991.

Rose, A. "Framing Our Experience: Research Notes on Reflective Practice." *Adult Learning* 3, no. 4 (January 1992): 5.

Roth, R. A. "Preparing the Reflective Practitioner: Transforming the Apprentice through the Dialectic." *Journal Of Teacher Education 40*, no. 2 (March-April 1989): 31-35.

Schon, D. Educating The Reflective Practitioner. San Francisco: Jossey-Bass, 1988.

Documents

Links

http://www.direct.gov.uk/en/EducationAndLearning/AdultLearning

http://www.hcc.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults

http://www.bbc.co.uk/learning/subjects/adult learning.shtml

http://www.adultlearningbcc.ac.uk/

Unit 8: Facilitating learning for students with special educational needs

Guidance/Description

The focus of the unit is how to support and challenge students with special needs. The teacher trainee gains competence in methods of teaching, how to organize the pedagogical structure of the teaching, and the development of competences, with regard to students with special needs.

Distribution theory, practice, self-study

Theory: 30% Practice: 40% Self-study: 30%

Learning outcomes

- 1. The teacher trainee prepares and delivers learning activities for disabled students (sight, hearing, motor function, speak etc.) with the use of special aid
- 2. The teacher trainee prepares and delivers learning activities for students with problems with regard to discipline, concentration, communication, and understanding.
- 3. The teacher trainee prepares a learning plan for the individual student in cooperation with parents and other teachers (team work)

Learning outcome No. 1

The teacher trainee prepares and delivers teaching for disabled students (sight, hearing, motor disfunction, speak etc.) with the use of special aid

Knowledge and understanding

The teacher trainee knows and understands:

- Rules, regulations and possibilities when it comes to individually planned learning activities
- How to use learning aids in the delivery of teaching
- The importance of working together with parents, other authorities and teacher teams at the TVET institution
- How ICT can be exploited and adapted in order to promote learning of disabled students

Performance criteria

The teacher trainee is able to:

- Prepare a learning activity with possibility of differentiation with regard to methods and materials
- Organising the class room in order to deliver a flexible education taking into account students with special needs and different background qualifications
- Use learning aids in the delivery of teaching
- Use ICT for development of learning aids and material

Learning environment

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding.
- The faculty offers a learning environment with examples of learning aid for students with special needs (such as computers with special software, models, learning material for students with special needs)
- The faculty offers access to a library and an updated electronic database on relevant literature

- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio
- The teacher trainee has access to training possibilities at TVET institutions when it comes to students with special needs – also for use in the self-study period
- The importance of close connection between theory, practice, and self-study must be underlined

Learning outcome No. 2

The teacher trainee prepares and delivers learning activities for students with problems with regard to discipline, concentration, communication, and understanding.

Knowledge and understanding

The teacher trainee knows and understands:

- The students' differences when it comes to development of learning competences
- The pedagogical structure with regard to supporting and challenging students with special needs
- The importance of working together with parents, other authorities and teacher teams at the TVET institution

Performance criteria

The teacher trainee is able to:

- Prepare a learning activity with possibility of differentiation with regard to methods and material
- Organising the class room in order to deliver a flexible education taking into account students with special needs
- Use ICT for development of learning aids and material
- Use learning aids in the delivery of teaching

Learning environment

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding
- The faculty offers a learning environment with examples of learning aid for students with special needs (such as computers with special software, models, learning material for students with special needs)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio
- The teacher trainee has access to training possibilities at TVET institutions when it comes to students with special needs
- The importance of close connection between theory, practice, and self-study must be underlined

Learning outcome No. 3

The teacher trainee prepares a learning plan for the individual student in co-operation with parents and other teachers (teamwork)

Knowledge and understanding

The teacher trainee knows and understands:

- How to make an individual learning plan
- The importance of working together with parents, other authorities and teacher teams at the TVET institution

Performance criteria

The teacher trainee is able to:

- Develop an individual learning plan
- Use ICT for development of learning plans
- Communicate with parents

Learning environment

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding
- The faculty offers a learning environment with examples of learning aid for students with special needs (such as computers with special software, models, learning material for students with special needs)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also for use in self-study periods
- The teacher trainee has access to training possibilities at TVET institutions when it comes to students with special needs
- The importance of close connection between theory, practice, and self-study must be underlined

Assessment

The teacher trainee delivers (alone or in small groups) a learning activity with differentiated learning methods and materials and/or assessment tools for students with reduced physical senses and another learning activity for students with problems with regard to discipline, concentration, communication, and understanding.

The teacher trainee must through a presentation of portfolios provide evidence to demonstrate that he/she can reflect on the importance of taking into account the different students needs.

LEARNING PACKAGE CORRESPONDING TO UNIT 8

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way, the teacher trainee practices student activating methods based on his/her own experience.

The unit is problem based. That means that it takes it is starting point in problems relevant to this special unit.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups reflecting that future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

ICT will be used as a communication channel and as a tool for the development of training materials.

Unit outline

The purpose of the education of the TVET institution is the same for all students. But the ways to reach the goals must be so broad that every student without hindrance has a chance to reach as many goals as possible.

Some students have special needs when it comes to education. They might not be able to attend the normal education with optimal profits. Sometimes the needs might be modest sometimes the needs might be rather comprehensive. In all cases, the students with special needs have ordinary development needs, just like all other students.

Special education and support is the possibility of the institution to support students with special needs; needs which cannot be completely met in the ordinary education. However, special education is not an alternative to ordinary education.

Especially for students with special needs it is important to promote a learning environment emphasising motivation, building up the self-confidence, different working speed and different learning styles.

The achievement of the skills and underpinning knowledge required for this unit would be facilitated by taking a starting point in the teacher trainee's own experience, with opportunities for student-centred discussions and exercises on topics relating to the outcomes.

Working methods

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding.
- In the self-study, the teacher trainee studies the subject and prepares a learning activity for students with special needs. (Preferably, the teacher trainees work together in the self-study time in small groups). The teacher trainee currently describes and reflects on his/her progress in the portfolio
- In the practice the teacher trainee, together with the mentor, practices performance of learning activities for students with special needs

Relevant working methods are development of knowledge and understanding in study groups, experiments in own practice, observation of other's practice, visits to other institutions, documentation of own learning processes and self-evaluation.

The practice of the unit will be experiments with preparing and delivering a lesson in own class and observation of lessons performed by the practice supervisor/mentor. In addition, the teacher trainee visits other institutions in order to see different ways of creating an inclusive learning environment. Experience from practice is described in the portfolio.

Evidence gathered from practice, i.e. natural performance, would be the primary method of assessing the teacher trainee's competence although a variety of other methods may be used either to supplement this or to provide evidence across the full range of performance criteria. The following forms of evidence would be appropriate to this unit:

- Preparation and delivery of a lesson for students with special needs
- Documentation, i.e. lesson plans, information/support materials, assessment plans, assessments.
- Peer assessment by the other teacher trainees or by the teacher master trainer carrying out teaching and assessment
- The teacher trainee's own description of his/her performance in a portfolio.

Examples of activities

To be developed

Literature

To be added

Documents

Links

http://www.boardofstudies.nsw.edu.au/special_ed/faq_11_12.html

http://www.learningplace.com.au/default community.asp?orgid=15&suborgid=344

Unit 9: Initial career counselling

Guidance/Description

The focus of the unit is to train the teacher trainee with regard to career counselling of the TVET students. The unit is an introductory level with regard to career counselling.

In this unit, the teacher trainee will learn to carry out an individual career dialogue with a student and to make an individual learning plan together with the student

Distribution theory, practice, self-study

Theory: 30% Practice: 40% Self-study 30%

Learning outcomes

- 1. The teacher trainee carries out an individual career dialogue with a student or a group of students
- The teacher trainee makes an individual learning plan together with the student, taking into account a societal perspective and a perspective of human development, recognition, communication, and culture

Learning outcome No. 1

The teacher trainee carries out an individual career dialogue with a student or a group of students

Knowledge and understanding

The teacher trainee knows and understands:

- Theories on person centred learning
- Development psychology in relation to young people and adults
- Different target groups (young people and adults) seen from an educational, psychological, cultural, and sociological perspective
- Theories on how to choose between educational options

Performance criteria

The teacher trainee is able to:

- Communicate and give feedback
- Creating an inclusive atmosphere
- Use multimedia for learning purposes

Learning environment

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding
- The faculty offers a learning environment with possibilities of training and videotaping individual career dialogues
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also for use in self-study periods
- The teacher trainee has access to training possibilities at TVET institutions when it comes to training of the individual career dialogue

Learning outcome No. 2

The teacher trainee makes an individual learning and career plan together with the student, taking into account perspectives of society and human development, recognition, communication, and culture

Knowledge and understanding

The teacher trainee knows and understands:

- Professional guidance development and history
- Philosophical and ethical approaches to guidance
- Overall global trends and the significance for society and individual
- Lifelong learning and competence development
- The functions, structures, possibilities and problems of youth and adult education
- Important developments in the private labour market/public sector and the possibilities of entrepreneurship
- The ways enterprises recruit employees
- Patterns of career development
- Human development possibilities seen from different psychological and social scientific perspectives
- The meaning of cultural values in connection with vocational education
- Integration of students with special needs

Performance criteria

The teacher trainee is able to:

- Analyse the individual student's need for guidance
- Make an individual learning plan for and with the student
- Analyse an individual learning plan when it comes to consequences for teaching and learning
- Cooperate with representatives of local trade and industry
- Use ICT for communication (Internet, mail, databases, etc.)
- Use ICT for development of a learning plan

Learning environment

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding
- The faculty offers a learning environment with examples of individual learning and career plans
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also for use in self-study periods
- The teacher trainee has access to training possibilities at TVET institutions when it comes to development of individual career plans

Assessment

The teacher trainee provides evidence of his/her skills with regard to career counselling by performing an individual learning and career dialogue with a student. The dialogue is videotaped. The teacher trainee makes an individual learning plan together with the student.

The teacher trainee must afterwards be able to analyse and evaluate the different phases of the dialogue and the communication between the teacher trainee and the student

The teacher trainee must provide evidence through a portfolio that he/she can reflect on his/her progress with regard to the learning outcomes of the unit.

LEARNING PACKAGE CORRESPONDING TO UNIT 9

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer and the mentor to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be it cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

Unit outline

The contents are theories on counselling (when it comes to learning outcome 1). Counselling should be seen from different perspectives:

- From a historical, ethical and philosophical point of view (counselling as a profession; different counselling roles and positions; theories on counselling, options and career development)
- From a societal point of view (globalisation and modernity; education politics and labour market politics)
- From the perspective of human development (the development of the individual; individual learning processes; communication theories)

The content of the unit – when it comes to learning outcome 2 – has to do with a dialogue between a teacher and student and with connecting the above mentioned analysis with the needs and wishes of the individual student

Working methods

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding.
- In the self-study, the teacher trainee studies the subject and prepares a learning activity for students with special needs. (Preferably, the teacher trainees work together in the self-study time

in small groups). The teacher trainee continuously describes and reflects on his/her progress in the portfolio

• In the practice the teacher trainee, together with the mentor, practice performance of learning activities for students with special needs

Relevant working methods are: development of knowledge and understanding in study groups, experiments in own practice, observation of other's practice, visits to other institutions, documentation of own learning processes and self-evaluation.

Evidence gathered from practice, i.e. natural performance, would be the primary method of assessing the trainee's competence although a variety of other methods may be used either to supplement this or to provide evidence across the full range of performance criteria. The following forms of evidence would be appropriate to this unit:

- Documentation, i.e. plans on counselling, information/support materials,
- Cases produced by the teacher trainee
- Observation by peers on videotaped counselling dialogues
- The teacher trainee's own description of his/her performance written, oral or visual in a portfolio

Examples of activities

To be developed

References

Literature

To be added

Documents

Links

http://www.careerplanner.com

http://www.career-counselling-services.co.uk

Unit 10: Development of a learning environment in TVET

Guidance/ Description

The teacher trainee organises a learning environment integrating vocational elements in the pedagogical design. The teacher trainee is able to use alternative learning environments, such as resource-based learning centres, virtual learning environment, and simulated environment (Practice company)

Distribution theory, practice, self-study

Theory: 20% Practice: 40% Self-studies: 40%

Learning outcomes

- 1. The teacher trainee organises a motivating learning environment in the TVET institution
- 2. The teacher trainee uses a learning environment in a resource-based learning centre/ open learning centres
- 3. The teacher trainee uses a virtual learning environment
- 4. The teacher trainee uses a simulated environment (Practice company)

Learning outcome No. 1

The teacher trainee organises a motivating learning environment

Knowledge and understanding

The teacher trainee knows and understands:

- The importance of creating a learning environment
- The interaction between teacher, students and education in a learning activity
- The importance of the organisational framework when it comes to pedagogical practice
- Theories on institution organisation and institution culture

Performance criteria

The teacher trainee is able to:

- Create a learning environment with regard to:
- Organise the classroom/workshop in order to give room for students with different learning styles
- Organise an interdisciplinary learning environment
- Organise the TVET institution in order to focus on the students' learning (i.e. rooms for experience, reflection, activity and concept making)
- Work in teacher teams

Learning environment

- The faculty offers lessons and exercises in order develop the teacher trainee's knowledge and understanding.
- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty provides rooms for group work
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study part
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined **Learning outcome No. 2**

The teacher trainee uses a learning environment in a resource-based learning centre/ open learning centre

Knowledge and understanding

The teacher trainee knows and understands:

- The concept of resource-based learning centres
- The teacher role (facilitator) in a resource-based learning centre
- Working forms and relevant material in a resource-based learning centre
- The importance of ICT in a resource-based learning centre

Performance criteria

The teacher trainee is able to:

- Perform as a facilitator in a resource-based learning centre
- Develop materials for a resource-based learning centre
- Work in teacher team
- Use relevant ICT programmes in a resource-based learning centre

Learning environment

- The faculty offers access to a resource-based learning centre/open learning centre.
- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty provides rooms for group work
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio- also in the self-study periods
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Learning outcome No. 3

The teacher trainee uses a virtual learning environment

Knowledge and understanding

The teacher trainee knows and understands:

- The concept of virtual learning environment
- Concepts of blended learning
- The teacher role (facilitator) in a virtual learning environment
- Working forms and relevant material in a virtual learning environment
- Relevant ICT programmes

Performance criteria

The teacher trainee is able to:

- Use a virtual learning environment
- Perform as a facilitator in a virtual learning environment
- Develop materials for a virtual learning environment
- Work in teacher teams

Use relevant ICT programmes in a virtual learning environment

Learning environment

- The faculty offers access to a virtual learning environment
- The faculty provides a motivating learning environment (preferably as an example of best practice) as well with regard to a physical and a virtual learning environment
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Learning outcome No. 4

The teacher trainee uses a simulated environment (Practice company)

Knowledge and understanding

The teacher trainee knows and understands:

- The concept of practice firms
- The teacher role (facilitator) in a simulated environment (practice company)
- Working forms and relevant material in a simulated environment (practice company)
- Relevant ICT programmes

Performance criteria

The teacher trainee is able to

- Use a simulating environment (practice company)
- Perform as a facilitator in a simulated environment (practice company)
- Develop materials for a simulated environment (practice company)
- Use relevant ICT programmes in a simulated environment (practice company)
- Work in teacher teams

Learning environment

- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods
- The faculty offers access to a simulated environment either in the faculty or in cooperation with a
 TVET institution
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Assessment

The teacher trainee organises a student-centred learning environment in the classroom/workshop (in the TVET institution)

The teacher trainee demonstrates (in small groups) that he/she can use one of the following three learning environments (1. the resource-based learning centre, 2. the virtual learning environment, 3. the simulated

environment (practice company) taking into account the interaction between teacher and students, the teacher role, the materials and the assessment strategy

The teacher trainee is evaluated by self-evaluation and assessment by the teacher master trainer.

LEARNING PACKAGE CORRESPONDING TO UNIT 10

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The practice part in this unit consists of the teacher trainee's experiments with establishing and/or using different learning environment.

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit is project oriented. That means that the teacher trainees' must have access to group facilities and that the teacher master trainer will be functioning as facilitator for the teacher trainees.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

Unit outline

The unit focuses on developing and using different learning environments in a modern TVET institution, a motivating learning environment taking into account the students' different learning styles and giving possibilities of enhancing the students' learning processes be giving room for reflection, experience, concept-making and activity.

The unit also focuses on new form of learning environments, such as a resource-based learning centre, a virtual learning environment, and a simulated environment. The latter especially stimulates the students' development of entrepreneurship competences

Different rooms in teaching and training

In most traditional teaching and training, we meet in rooms in which we have an expert (the teacher or trainer) and some people to be taught. A lot of lessons have been learned in such settings.

On the other hand, we know that it is possible to learn under different conditions. We learn throughout life – at work, leisure and in school. We learn from doing different things – successfully or from failures, we did. We learn from listening to others, from discussing things with others, from observations etc.

In addition, we learn different things dependent on the processes involved. In spite of that, it seems to be the case, (in most situations) that we still organise traditionally - in classrooms, with a teacher, well-known educational means like whiteboards, overhead projectors, and with participants supposed to listen etc. The reason why we organise so traditionally may be that we still find it natural to organise learning in school-settings instead of involving for instance practice. Probably because the two different environments function according to different laws, different logics, different values etc.

Instead of thinking in either to use the school-arena or the practice-arena, it might be an idea to use them both – in different ways and with different purposes.

In addition, there are more than two options. Each of them could be called a room although it not necessarily is a room as such – or the same room could be used for several different purposes. The rooms are:

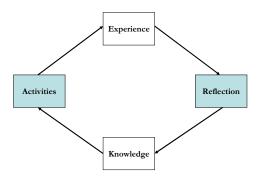
- Lesson rooms
- Study rooms
- Simulation rooms
- Practice rooms

By thinking in such different rooms or arenas it is possible to work with a variety of activities, and to achieve goals and ambitions that would not be possible to realize in the traditional school setting.

In short, the different rooms can be described like this:

- The lesson room: One way is to organise the whole thing as lessons, where the trainer teaches the participants, and where the trainer does the talking, while participants are listening. This is a well-known situation, which can be characterised as vertical learning, where a person with more-knowledge communicates with people with less knowledge in order to ensure that they get more knowledge, more skills and/or new attitudes. Almost everything takes place on the trainer's conditions, and the role of the trainer is "the teaching expert"
- The study room: Another way to organise the study room is based on participants' needs and on their conditions. Participants work for themselves, they study, they reflect, they may discuss things among themselves they experiment if that is what they find helpful, or study if they find that better individually or in groups as they like, and as they prefer themselves. They may interview each other they try to learn in networks and/or try to improve knowledge by exchanging explicit knowledge and (?) identify each other's tacit knowledge when and if they co-operate. If it's best, new knowledge will emerge. The role of the trainer is "the supporting facilitator and coach"
- The Simulation room: In order to get a closer relationship between theory and practice participants could work with a simulated reality. It could be cases or other kinds of simulating environments. If the purpose is about giving participants a better knowledge of practice, without meeting it directly, and furthermore do it under laboratory conditions (with all the pros and cons connected to that) simulation seems to be a good idea. The role of the trainer is "the questioning and listening consultant" with a good knowledge of both theory and practice.
- <u>The practice room</u>: Finally, training can take place directly related to practice. This means that the result can be implemented directly in practice at the same time competence development of

participants take place. Action learning programmes is good examples of such an approach. The role of the trainer is "the inventor of adequate activities and well performed reflection activities" in a process like this:



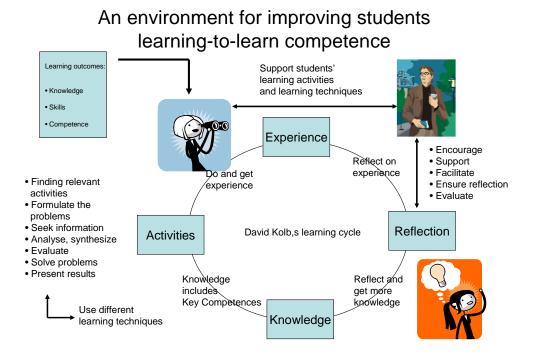
The trainer's main responsibility is to ensure that adequate activities (in relation to what should be learned) are chosen, and that reflection on participants' experience is carried out

Trainers must be able to choose among those rooms in order to get the best thinkable results.

Examples of working methods

In order to ensure that students acquire the key competence "learning-to-learn", students must work problem-based and with activities that give them a competence to formulate problems, solve problems, cooperate, seek information, use and share information with peers, analyse and synthesize and present results etc:

It look as below:



Part of the whole organisation is to convince students about the value of working in that way, and also to help them to use different learning techniques. Another part is that the teacher is a facilitator for students' learning processes, and that includes:

- An eye on the learning outcomes
- Encouragement in relation to students' persistence and problem-solving
- Students' cooperation with peers
- Organisation of the necessary reflection processes
- Continuous assessment of the whole process and intervention if necessary

The teacher will learn to work with the improvement of students' learning-to-learn competence by organising learning environments like the above mentioned. The only way to learn how to do it is actually to do it – and reflect on the experience (in action and on action).

It can be done in phases where students start using different learning techniques in relation to more ordinary teaching activities, and/or students are encouraged to formulate problems in relation to a traditional lesson, to reflect on experience gained through traditional teaching etc.

Just to start using learning outcomes as a tool for students engagement and involvement could be a useful element in starting to work with students' learning processes – and it is important here to emphasise that teaching, of course, will still exist - both students' and teachers' activities should depend on what competence is aimed on.

References

Literature

Boud, David & Grahame Feletti (1998) The Challenge of Problem-based Learning. London: Kogan Page

Schon, Donald, A. (1995) The Reflective Practitioner: How Professionals Think in Action Ashgate Publishing

Anagnostopoulos, Dorothea, Kevin G. Basmadjian & Raven S. McCrory (2005) "The Decentred Teacher and the Construction of Social Space in the Virtual Classroom". *Teachers College Records Volume 107, Number 8.* Columbia University: Teachers College

Picciano, Anthony G. (Ed.) Blended Learning. Research Perspectives. The Sloan Consortium (http://www.blendedteaching.org/blendedbook)

Documents

Links

Learning environments:

http://www.newhorizons.org/strategies/learning environments/front Irnenvironments.htm

Resource-based learning:

http://www.dest.gov.au/sectors/training_skills/policy_issues_reviews/key_issues/nts/dap/flexible_learning.htm

Download document on a "resource based learning environment" (from Learning and Skills Network): https://www.lsneducation.org.uk/user/login.aspx?code=060004&P=060004PD&action=pdfdl&src=XOWEB

Blended Learning in general:

http://grayharriman.com/blended_learning.htm

Links to Blended Learning:

http://www.e-learningcentre.co.uk/eclipse/Resources/blended.htm

Strategies for Building Blended Learning

http://www.learningcircuits.org/2003/jul2003/rossett.htm

Blended Learning models:

http://www.learningcircuits.org/2002/aug2002/valiathan.html

Unit 11: Effective communication – in theory and practice

Guidance/ Description

Communication is the fundament for interpersonal activity and the prerequisite for social behaviour and actions. The purpose of this unit is to develop the teacher trainee's communicative competence by enhanced consciousness and training in order to be able to improve the social interaction between the mutual students and between the teacher and the students.

Distribution theory, practice, self-study

Theory: 30% Practice: 35% Self-studies: 35%

Learning outcomes

- 1. The teacher trainee develops communicative competence in order to improve the social interaction between the mutual students and between the teacher and the students
- 2. The teacher trainee is able to seek and use information, as well by the use of internet as by the use of libraries

Learning outcome No. 1

The teacher trainee develops communicative competences in order to improve the social interaction between the mutual students and between the teacher and the students

Knowledge and understanding

The teacher trainee knows and understands:

- Theories on communication (among other things transaction analysis; Johari's window)
- The body language and consciousness of how to use it
- Own communication style

Performance criteria

The teacher trainee is able to:

- Use different communication styles according to the group of students
- Consciously use of body language
- Use techniques for improving own communication style
- Reflect on and develop own communication style

Learning environment

- The faculty offers lessons, exercises and training facilities (with possibility of videotaped communication exercises) in order develop the teacher trainee's knowledge, understanding and skills when it comes to effective communication
- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Assessment

The teacher trainee performs practical exercises to demonstrate that he/she has communicative competence.

Also the teacher trainee must provide evidence of his/her communication skills by reflection in his/her portfolio on experience with different communication styles.

Learning outcome No. 2

The teacher trainee is able to seek and use information, as well by the use of internet as by the use of libraries

Knowledge and understanding

The teacher trainee knows and understands:

- The systematic of a scientific library
- Electronic search engines

Performance criteria

The teacher trainee is able to:

- Use libraries for further information
- Use electronic search machines (like Google, Wikipedia etc.)

Learning environment

- The faculty offers lessons, exercises and training facilities (with possibility of videotaped communication exercises) in order develop the teacher trainee's knowledge, understanding and skills when it comes to effective communication
- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio – also in the self-study periods
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Assessment

The teacher trainee performs practical exercises to demonstrate that he/she has communicative competence.

In addition, the teacher trainee must provide evidence of his/her communication skills by reflection in his/her portfolio on experiences with different communication styles.

LEARNING PACKAGE CORRESPONDING TO UNIT 11

Principles of delivery

The teacher trainee is active the theory part, the practice part, and the self-study part. In this way the teacher trainee practices student activating methods from his/her own experience.

The practice part in this unit consists of the teacher trainee's training in communication

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods...

Unit outline

Communication is a social process and as the teacher must be able to enhance the students' learning process, he/she must therefore be aware of the importance of communication, as well his/her own as the mutual communication between the students.

The teacher always has a double consciousness: As well on the lesson plan (the preparation before the lesson - in the teacher's head) and on the learning and communication process in the classroom/workshop (the body in the room). In this unit, focus will be on "the body in the room" in relation to different groups of students.

The content will be based on exercises. Theory, methods and analysis are trained in exemplary learning activities with focus on the teacher trainee's personal development.

The contents of the self-studies are focused on reflection on own communication style and reflections on and analysis of the students' mutual communication.

The contents are experiments with own communication style and observation of the practice supervisor or other teachers' communication styles in classrooms/workshops. Experience from practice is described in the portfolio.

Working methods

Evidence gathered from practice, i.e. natural performance, would be the primary method of assessing the trainee's competence although a variety of other methods may be used either to supplement this or to provide evidence across the full range of performance criteria. The following forms of evidence would be appropriate to this unit:

- Documentation, i.e. videotaped communication sequences
- Observations, reflecting teams using the classroom as a laboratory
- The trainee's own description of his/her performance written or oral in a portfolio

Examples of working methods

The teacher as a professional communicator

A **Johari window** is a psychological tool created by <u>Joseph Luft</u> and <u>Harry Ingham</u> in 1955 in the United States, used to help people better understand their interpersonal <u>communication</u> and <u>relationships</u>. It is used primarily in <u>self-help</u> groups and corporate settings as an <u>heuristic</u> exercise.

When performing the exercise, the subject is given a list of 55 adjectives and picks five or six that they feel describe their own personality. Peers of the subject are then given the same list, and each pick five or six adjectives that describe the subject. These adjectives are then mapped onto a grid.

Yohari's window

Can be seen By others Cannot be seen by others

Conscious

Unconscious

Free	Private
What we show	Potential
Blind	Hidden
What we can't see	The therapist's
Ourselves	area

The person can be described in four windows: On the conscious level, there is a part of you that can be seen from others, and another window that cannot be seen from others. This window hides the private life of the professional communicator.

On the unconscious level, there is a window, which is blind. This is the window that may be improved by the feedback of others. The last window is as well unconscious as invisible for others.

Exercise:

Adjectives selected by both the participant and his or her peers are placed into the **Arena** quadrant. This quadrant represents traits of the participant of which both they and their peers are aware.

Adjectives selected only by the participant, but not by any of their peers, are placed into the **Façade** quadrant, representing information about the participant of which their peers are unaware. It is then up to the participant whether or not to disclose this information.

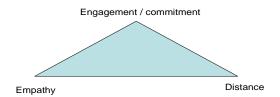
Adjectives that are not selected by the participant but only by their peers are placed into the **Blind Spot** quadrant. These represent information of which, the participant is not aware, but others are, and they can decide whether and how to inform the individual about these "**blind spots**".

Adjectives which were not selected by either the participant or their peers remain in the **Unknown** quadrant, representing the participant's behaviors or motives which were not recognized by anyone participating. This may be because they do not apply, or because there is collective ignorance of the existence of said trait.

The Teachers' communication styles

In order to improve the teacher's communication style Marianne Kristiansen, Danish professor from Aalborg University, in her book *Professional Communication* has described key elements of the teacher' professional communication style:

Professional communication



- Empathy (Ability to listen)
- Distance (Ability to make a general view)
- Engagement (Ability to be yourself and listen to your heart)

As a consequence of the aspects she has detected four communication styles characteristic for teachers:

The Technician – has great distance and little empathy - is seen in the communication by:

- Body language:
 - limited eye contact
 - big distance to the participants
- verbally:
 - one way communication
 - use of technical terms
 - dialogue with participants with same background
- para verbally
 - monotonous voice
- can improve by working with:
 - improve the start and lecture in order to motivate participants
 - eye contact
 - use the physical room
 - ask questions and make dialogues

The Perfectionist - little empathy, formal and teaching distance - is seen in communication by:

- Body language:
 - serious mimic
 - discrepance between own seriousness and humour of participants
 - fixed eye contact with the most brilliant participants
- Verbally:
 - precise and formal language
 - leading questions
 - tendency to use words as "never". "always", "just", "totally wrong"
- para verbally
 - clear voice
- can improve by working with:
 - to give and allow positive feedback
 - to accept msitakes (own and other's)

- to use humor
- to avoid negative "parent comments"

The Turbo pedagogue - little empathy, stresses unconsciously himself - shown in communication by:

- Engagement bodily, para bodily and verbally:
 - use of "upgraders" ("amazing", "fantastic")
 - use of living dramatically gestures
 - use of various voice levels
 - use of the physical room
- stress communication bodily and para language:
 - overseeing participants contributions
 - too many gestures and red spots
- verbally
 - break off answers from participants
 - short or no feedback
- can improve by working with:
 - make breaks
 - listen
 - be conscious of non-verbal feedback

The antenna pedagogue - great empathy and notion of situations, no leadership and distance - is seen in the communication by:

- Body language:
 - use of eye contact and active listening
 - able to read non-verbal feedback from participants
 - use of physical room
 - leaving the arena to the participants
- verbally:
 - ability to use good examples
 - ability to ask relevant questions
 - tendency to let others break her off
 - use of "down graders"
- para verbally
 - many "e'es", long breaks
- can improve by working with:
 - ask open questions and ask for examples
 - mark with language, body and para language that "I own the arena"
 - avoid down graders

Exercise:

Individual task:

Try from the presented "teacher types" to identify yourself as a teacher, it might be

More or less...

Closest to....

Not at all....

Discuss your answers in pairs

- Compare your marks
- Discuss advantages/disadvantages regarding the four types

References

Literature

Kristiansen, Marianne: Professional presence – on the unconscious communication of the educators, in a book called "Personal Communication", 1994

Documents

Links

Johari's window:

http://en.wikipedia.org/wiki/Johari

http://www.btinternet.com/~p.g.h/newfiles/joharis-idx.htm

http://www.noogenesis.com/game_theory/johari/johari_window.

Electronic information:

Fronter:

http://fronter.co.uk/uk/

Blackboard:

http://blackboard.com/us/index.Bb

Groupcare:

http://www.groupcare.biz/about.aspx?lang=en

Moodle (a free open source software):

http://moodle.org/

PBwiki (free of charge)

http://pbwiki.com/

Google groups (free of charge):

https://groups.google.com/

Unit 12: Pedagogical leadership, enhancing effective learning

Guidance/Description

The teacher trainee develops competences in delivery of teaching enhancing effective learning and performing classroom management.

Distribution theory, practice, self-study

Theory: 20% Practice: 30% Self-studies: 50%

Learning outcomes

- 1. The teacher trainee delivers enhanced effective learning performing classroom management
- 2. The teacher trainee evaluates own and others' teaching

Learning outcome No. 1

The teacher trainee delivers enhanced effective learning performing classroom management

Knowledge and understanding

The teacher trainee knows and understands:

- Pedagogical leadership
- Methods enhancing effective learning
- The relation between the didactical structure of a lesson and the performance
- Assessment and evaluation tools and their relation to the students' learning process

Performance criteria

The teacher trainee is able to:

- Deliver teaching enhancing effective learning
- Use different methods in delivery of a learning activity
- Perform pedagogical leadership
- Communicate outcomes and assessment criteria in a clear and understandable way for the students
- Encourage the students in taking responsibility for their own learning process
- Evaluate the learning process and modify where necessary

Learning environment

- The faculty offers lessons, exercises and training facilities (with possibility of videotaped lessons) in order develop the teacher trainee's knowledge, understanding and skills when it comes to effective communication
- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study period
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Learning outcome No. 2

The teacher trainee evaluates own and others' teaching

Knowledge and understanding

The teacher trainee knows and understands:

Theories on observation, feedback and active listening

Performance criteria

The teacher trainee is able to:

Observe, give feedback and perform active listening

Learning environment

- The faculty offers lessons, exercises and training facilities (with possibility of videotaped lessons) in order develop the teacher trainee's knowledge, understanding and skills when it comes to effective communication
- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Assessment

The teacher trainee delivers a lesson, receiving feedback from peers.

The teacher trainee must provide evidence through portfolios to demonstrate that he/she can reflect on the way in which he/she delivers a learning activity.

LEARNING PACKAGE CORRESPONDING TO UNIT 12

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The practice part in this unit consists of the teacher trainee's training in delivering enhanced effective learning performing classroom management

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self- studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

Unit outline

This unit focuses at skills in delivering enhanced effective learning and classroom management.

The content is focused at basic methodological and didactical problems when it comes to delivery and performance of lessons. For instance, how to motivate the students by interpreting and formulating substantial learning outcomes and objectives; how to deliver content, methods, materials, assessment, and how to organise a learning environment.

Delivery and observation methods are trained by lesson exercises, where the teacher trainees interpret and set up objectives, delivers content using methods, and trying out different approaches to teaching and learning in a concrete context, with feedback from peers.

The achievement of the skills and underpinning knowledge required for this unit would be facilitated by orientation of delivery towards the teacher trainer's own experience, with opportunities for student-centred exercises and discussions on topics relating to the outcomes.

Working methods

The contents of the self-studies are focused on reading of literature, observations in practice and descriptions of relevant problems within the unit and in relation to own practice. Relevant working methods are study groups, experiment in own practice, observation of other's practice, documentation of own learning processes and self-evaluation.

The contents of the practice part are experiments with delivery of teaching and enhancing effective learning in own class and observation of enhancing effective learning in other classrooms/workshops performed by the master trainer. Experience from practice is described in the portfolio.

Example of working methods

The PEEL Project (Project for Enhancing Effective Learning)

The PEEL experiment is about detecting students good and bad learning habits – and improving the bad learning habits through consciousness and teaching techniques. They PEEL group have found the following concerns about learning among

- Students rarely contribute any ideas of their own in the class
- Students accept whatever they read or hear without question
- Predict, observe, explain
- Students don't think ahead and don't think back to previous lessons
- Students won't try and really understand the work they don't know how to think
- Teacher finds it difficult to actively negotiate with students
- Students keep making the same mistakes time and again
- Students don't read questions or instructions carefully

- Students regard assessment tasks as final and they don't learn from their mistakes
- Students won't take any responsibilities for their performance

They work systematically with improving these bad habits for instance by using the method *Predict, Observe, Explain (POE)*:

Three stages:

- 1. The students are shown a situation and asked to make a written prediction with reasons as to what they think will happen
- 2. The change is made and the students record their observation of what happened
- 3. The students attempt to make explanations to account for any differences between their prediction and their observations

Points of advice:

- It is crucial that the students realise they are not alone in their prediction. Important to summarise the class views
- Make it a non-threatening situation (no marks or praise of "correct" answers)
- Incorporate an interpretive discussion after "P" and before "O"

At the end of the exercise ensure that "incorrect" predictions are seen as often sensible and always helpful to the learning

References

Literature

John R. Baird and Northfield Jeff, Learning from the PEEL Experience, Melbourne, 1992

Biggs John, Teaching for Quality Learning, Open University Press, 2003

Documents

Links

Learning techniques:

http://www.cs.queensu.ca/~skill/learning.html

Learning environments:

http://www.newhorizons.org/strategies/learning environments/front Irnenvironments.htm

Learning styles:

http://www.newhorizons.org/strategies/styles/front styles.htm#rr

Multiple intelligence:

http://www.google.com/search?q=multiple+intelligences&rls=en&ie=utf-8&oe=utf-8&go=seek

Accelerated learning:

http://www.memletics.com/manual/default.asp?ref=ga&data=accelerated+learning

Accelerated learning:

http://www.acceleratedlearning.co.uk/

Accelerated learning techniques:

http://www.newhorizons.org/strategies/accelerated/front_accelerated.htm

Personalised learning. Tutorials and peer mentoring: https://www.lsneducation.org.uk/user/login.aspx?code=072727&P=072727PD&action=pdfdl&src=XOWEB (a guide produced by Learning and Skills Network (2007)

Experiential learning: https://www.lsneducation.org.uk/user/order.aspx?code=072762&src=XOWEB produced by Learning and Skills Network (2007

Unit 13: Assessment strategies, including students' self-assessment

Guidance/Description

The teacher trainer develops and uses assessment tools and uses assessment as a learning strategy when it comes to following up on the students' outcomes.

In the TVET sector, it is important to improve the concept of "reflective practice". For this purpose, self-assessment is a relevant tool. The teacher trainee must be able to make the students use self-assessment tools and methods such as portfolio, log books, etc.

Distribution theory, practice, self-study

Theory: 30% Practice: 35% Self-studies: 35%

Learning outcomes

- 1. The teacher trainee uses assessment methods according to an assessment strategy
- 2. The teacher trainee makes the students use self-assessment tools such as portfolios, log-books, etc.

Learning outcome No. 1

The teacher trainee uses assessment methods according to an assessment strategy

Knowledge and understanding

The teacher trainee knows and understands:

- The concepts of assessment (such as summative and formative; internal and external assessment etc.)
- The influence from assessment methods on the learning outcomes

Performance criteria

The teacher trainee is able to:

- Use summative assessment methods
- Use formative assessment methods
- Develop an assessment strategy/plan

Learning environment

- The faculty offers lessons, exercises and training facilities (with possibility of videotaped lessons) in order develop the teacher trainee's knowledge, understanding and skills when it comes to effective communication
- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Learning outcome No. 2

The teacher trainee makes the students use self-assessment tools such as portfolios, log books, etc.

Knowledge and understanding

The teacher trainee knows and understands:

- The concept of self-assessment and evaluation and the implication on the learning process
- The concept of being a reflective practitioner and meta cognition
- The use of a portfolio as a means of personal and professional development

Performance criteria

The teacher trainee is able to:

- Write a portfolio
- Teach the students to write a portfolio
- Conduct self-assessment with the students

Learning environment

- The faculty offers lessons, exercises and training facilities (with possibility of videotaped lessons) in order develop the teacher trainee's knowledge, understanding and skills when it comes to assessment and evaluation
- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study period
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Assessment

The teacher trainee develops an assessment strategy including the students' self-assessment.

The teacher trainee demonstrates through a portfolio that he/she can reflect on the effect on the learning process by using different assessment methods taking into account the different students and their different needs.

LEARNING PACKAGE CORRESPONDING TO UNIT 13

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience. In this unit, the working method is project orientated.

The practice part in this unit consists of the teacher trainee's training in using different assessment tools and development of an assessment strategy (including use of students' self-assessment)

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit is project oriented. That means that the teacher trainees' must have access to group facilities and that the master trainer will be functioning as facilitator for the teacher trainees.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

Unit outline

The assessment system has a dominant influence on the way students learn; on how much effort they put into the learning. Therefore, it is very important that the teacher trainee pays attention to this and master a number of assessment tools and is able to use them strategically in order to enhance the students' learning.

The content of this unit therefore presents principles and examples of assessment methods. The teacher trainee experiments with development of own assessment tools and with development of a strategy for assessment over a period.

Special emphasis is put on training of self-assessment methods.

When it comes to professional development, it involves self-development. To facilitate learning or to nurture professional development involves the whole person, cognitively and emotionally. For this purpose, the employment of portfolios is use full, as it delivers a possibility for examination of several aspects of the person. In this unit, different aspects of the use of portfolios are unfolded, as a leaning tool as well as ethical aspects of this.

Working methods

The contents of the self-studies are focused on reading of literature on assessment and experiments with performing summative and formative assessment in relation to own practice. Another important issue of the self-study of this unit is to reflect on the use of portfolios. Relevant working methods are: study groups, experiments in own practice, observation of other's practice, documentation of own learning processes and self-evaluation.

The contents of the practice part are experiments with assessment methods and development of an assessment strategy. Experience from practice is described in the portfolio.

Examples of working methods

Learning Journals, Jennifer Moon, Kogan Page, 1999 The following are notes from Chapter 3, The use of learning journals

The purpose of learning journals

To record experience

The primary purpose for most of those who write journals is to "record experience".

To facilitate learning from experience

While some journals are primarily for the recording of experience, others emphasize the processes of reflection that follow from experience. This is the case for those that follow either the Kolb cycle of experimental learning or the work of Schön on reflection-on-action.

To encourage meta-cognition

Some writers are interested in the enhancement of meta-cognitive capacities as an experimental outcome of journal writing.

To increase active involvement in and ownership of learning

Developing a sense of ownership of material is a condition that facilitates learning.

To increase ability in reflection and thinking

Journal writing and reflection are linked both in general terms and in the manner, that reflection is fundamental to the taking of a deep approach to learning.

To enhance problem-solving skills

In some of the areas of the curriculum, the value of writing has been demonstrated on the process of problem solving.

As a means of assessment in formal education

Learning journals may be set explicit for the purpose of assessment.

To enhance reflective practice

Professional practice is a broad area of activity that probably includes most of the purposes of journal use

For reasons of personal development and self-empowerment

The use of journals to enhance and develop the self may overlap with professional development.

To enhance creativity

A number of writers talk about the relationship of journal writing and creativity. *To improve writing* The improvement of writing is one of the more common explicit purposes for journal writing in formal situations.

To improve or give "voice"; as a means of self-expression

Some learners are not as able as others are at self-expression. Journals provide a means of enabling them to express themselves in an alternative manner.

To foster communication and to foster reflective and creative interaction in a group

Some writers have mentioned a purpose of journal writing to be to facilitate the interaction within a group.

To support planning and progress in research or report

Journals may be concerned with quite specific issues – such as the work in one discipline in formal education.

Try to make your own learning journal!

Self-reflection tools and exercises

Ask yourself:

- 1. What do I need to learn?
 - Consciousness of goals and objectives
- 2. How do I prefer to learn?
 - Consciousness of own learning style
- 3. What can I do to improve my learning?
 - Consciousness of the learning process
 - To be able to use effective learning methods, for instance seek necessary help
 - Discuss with your learning mate and your teacher

- Plan your work
- Explain to yourself what the goals and objectives are
- See the job in "a bigger context"

Portfolio

Linguistic intelligence

• Notes, assignments, reports

Logic mathematical intelligence

• Examples of problem solving, calculations

Spatial intelligence

• Models, photos, diagrams, schedules, mind-maps, collages

Musical intelligence

• Tapes, song

Body-kinesthetic intelligence

• Videotapes of project demonstration

Inter-personnel intelligence

• Correspondence, minutes from meetings

Intra-personnel intelligence

• Parts of log books, notes from dialogues on own learning progress

Student's contract

To demonstrate I can_____ i would like to:

- Write a report
- Make a photo collage
- Build a model
- Make a demonstration for the class
- Make a statistical survey
- Make a log book
- Make interviews
- Make a lecture for the class
- Set up an experiment
- Make a mind-map
- Arrange a debate or a discussion

Appraisal system for students

Please see next page

What do I need to learn? How do I prefer to learn?

I must be able to know this/ be able to do this:	What do I need to know before I can do it?	This is how I can learn it	I choose to learn it this way	What have I learned?
Gas welding -Security -Equipment -Adjustment -Technique	-Practice -Technique -Security regulations	-Read books on the subject -Look at videos -Exercise -Teacher demonstrates -Lectures	-Teacher demonstrates -Exercises -Read book on the subject	To weld with gas
Electrode welding -Security -choose electrodes -Equipment -Adjustment technique	-Choose electrodes and equipment	-Read books on the subject -Look at videos -Exercise -Teacher demonstrates -Lectures	-Look at videos -Exercises -Teacher demonstrates	To weld with electrodes in joints and borders

At a learning dialogue the student and the teacher assesses the result. Please note that there might be differences between their assessment. This template is meant as a dialogue tool in order to improve the student's consciousness on his own efforts:

Self assessment for plumber students

	Student's assessment	Teacher's assessment
I. I can include my knowledge on security in my daily work		
2. I can weld with gas		
3. I can make a technical drawing of a pipe chart		

References

Literature

Moon, Jennifer, Learning Journals – a Handbook for academics, students and professional development, Kogan Page, 1999

Palmer Wolf, Dennis, in "Educational leadership", 1989

Documents

Links

Self-evaluation:

http://www.indiaeducation.net/careercenter/self evaluation/

http://www.evergreen.edu/washcenter/resources/acl/e3.html

http://www.ncrel.org/sdrs/areas/issues/methods/assment/as5**self**e.htm

http://www.unilever.com/ourcompany/careers/personal evaluation toolkit

Unit 14 Teacher development – colleague support

Guidance/ Description

The purpose of colleague support is to develop the teacher trainee's practical theory on teaching and learning through improving consciousness and reflection-in-action and reflection-on-action — and for the teacher trainees in teams to develop their professional practice and ethics. The method rests on coaching and dialogue techniques.

Distribution theory, practice, self-study

Theory: 20% Practice: 50% Self-studies: 30%

Learning outcomes

The teacher trainee performs colleague support

Learning outcome No. 1

The teacher trainee performs colleague support

Knowledge and understanding

The teacher trainee knows and understands:

- Colleague support as a method of developing the teacher teams' professional practical theory
- Coaching as a teacher development method
- The ethics when it comes to colleague support

Performance criteria

The teacher trainee is able to:

- Coach and perform dialogue techniques
- Act in the different roles of the colleague support process (supervisor, being supervised, observer)
- Cooperate in a teacher team when it comes to putting up joint learning outcome for development of the team with the help of colleague support

Learning environment

- The faculty offers lessons, exercises and training facilities (with possibility of video taped colleague dialogues) in order develop the teacher trainee's knowledge, understanding and skills when it comes to teacher development with the help of colleague support
- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self study periods
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Assessment

The teacher trainee performs colleague support in teams of three in order to demonstrate the competence.

The teacher trainer must provide competences in reflection on learning outcomes and pitfalls of colleague support in his/her portfolio.

LEARNING PACKAGE CORRESPONDING TO UNIT 14

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies In this way the teacher trainee practices student activating methods from his/her own experience.

The practice part in this unit consists of the teacher trainee's training in colleague support.

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Unit outline

Much of the teacher's work and competences are personally bound, private, and tacit. At the same time, we acknowledge that the development of teachers' competences must take a starting point in and build on the competence of the teacher team. Until now, there has been poor tradition in the TVET institution for sharing knowledge when it comes to systematic development of the teachers' job.

The focal point of colleague support is *not* to make others act in a way someone else appreciates, but to develop the teacher trainee's own practical theory on teaching and learning, while the teacher team – together – develops their professional practice

Working methods

The content will be based on exercises. The teacher trainees will be working in teams and using each other in the mutual process trying out all roles of colleague support (supervisor, being supervised and observer). Theory, methods and analysis are trained in exemplary learning activities with focus on the teacher trainee's personal development

The contents of the self-studies are focused on reflection on advantages and pitfalls of colleague support

The contents of the practice part are experiments with colleague support. Experience from practice is described in the portfolio.

Examples of working methods

Coaching Exercise

The exercise takes place in groups of three persons.

The aim of this exercise is for the participants to study the problems connected with coaching people when it comes to understanding a problem in connection with their study or work and examining the possible solutions to this. The exercise provides the participants with an opportunity of playing three parts: the one with a problem, the coach and the observer (twice).

Time consumption: approximately 1 - 2 hours.

The group consists of four persons. For approximately 7 minutes, one person (the one with a problem) talks to another person (the coach) about a problem connected with his job, education or study. The other two persons (the observers) control the time consumption, listens, observes, and later they give feed-back to the other two.

The exercise has to be performed four times, so that each member of the group gets the opportunity of playing all three parts. In connection with this exercise, there are certain guidelines:

Guidelines for the guidance-seeker:

- 1. Think about an unsatisfactory situation at work that you would like to change. In order to make the exercise as realistic as possible it is important that you choose a subject, which is of importance to you personally. If you can't find a problem in your working life, try finding one from your leisure time or family life.
- 2. Be brief and specific when you present your topic to the coach the counsellor.
- 3. When you have presented your problem briefly, you must give the coach a chance to ask questions which may contribute to the clarification of your problem. Do not talk too much.

Guidelines for the coach:

- 1. Your task is to help the guidance-seeker to define and talk about his problem. To try to see the problem from other angles and make the guidance-seeker deal with the problem specifically enough to find a solution.
- 2. Don't take over the problem. Resist the temptation to say things like: "I think that your real problem is..." or "You should...". By asking questions and reformulating you must try to make the guidance-seeker see the things in the problem, which you see and understand. Help the guidance-seeker to see into the problem and himself/herself.
- 3. Do not deny the existence of the problem or make the problem seem smaller. You must realize that the problem is important for the guidance-seeker. Rather than saying: "I have also experienced this, but I don't think it was so difficult to solve the problem" it is better to ask: "What do you know about it?" or "What does it mean to you?" Help the guidance-seeker focus on what he wants and can do, not what the others should do.
- 4. At the end of the session, you might offer some information about theories or materials you know, and which could be of help to the guidance-seeker. However, let it be his decision if he wants to use them.

Guidelines for the observers:

- 1. Your task is to observe and listen as carefully as you can. Keep entirely in the background. Do not disturb the conversation, but concentrate on your role as observer. After the conversation, you comment briefly on what you have seen and heard do it in such a way that you encourage the guidance-seeker and the coach to consider and discuss your observations.
- 2. Ask yourself during the conversation: What is going on between the coach and the guidance-seeker? How is the contact between them? Does the coach help the guidance –seeker to speak freely about his problems and himself? You must also observe their non-verbal behaviour, their voices, facial expressions, body attitude etc. Have they defined the problem clearly enough before they begin to solve it?
- 3. How is the conversation managed and by whom? Who speaks most? How does the coach manage the conversation? What "means" are used? Is the coach "ahead of" or "behind" the guidance-seeker?

Where is the monkey?

As coach it is important to be aware of the fact that the problem described by the guidance-seeker is *his* problem, not your own. In other words: the responsibility for solving the problem rests on the guidance-seeker. In this connection the concept of "the monkey" can be used. The person, who has the problem, has "the monkey" on *his* shoulder. In many cases the guidance-seeker will try to place "the monkey" and thereby the responsibility on the coach's shoulder. The coach must be aware of this and make sure that "the monkey" is returned to the person who is responsible for taking action to solve the problem. If the counsellor is aware of the concept of "the monkey", it will be easier for him/her to locate it.

References

Literature

Schon, D. Educating The Reflective Practitioner. San Francisco: Jossey-Bass, 1988.

Brookfield, S. D. Developing critical thinkers. San Francisco: Jossey-Bass, 1988.

Cervero, R. M. Effective continuing education for professionals. San Francisco: Jossey-Bass, 1988.

Kottkamp, R. B. "Means for Facilitating Reflection." Education And Urban Society 22, no. 2 (February 1990):182-203.

Mezirow, J., ed. Fostering Critical Reflection In Adulthood. San Francisco: Jossey-Bass, 1990.

Peters, J. "Strategies for Reflective Practice." In *Professional Development For Master trainers Of Adults. New Directions*

Rose, A. "Framing Our Experience: Research Notes on Reflective Practice." *Adult Learning* 3, no. 4 (January 1992): 5.

Roth, R. A. "Preparing the Reflective Practitioner: Transforming the Apprentice through the Dialectic." *Journal Of Teacher Education 40*, no. 2 (March-April 1989): 31-35.

Documents

Links

http://www.nlp-coaching.org

http://en.wikipedia.org/wiki/Coaching

www.1000ventures.com/business guide/crosscuttings/coaching main.html

Personalised learning. Tutorials and peer mentoring: https://www.lsneducation.org.uk/user/login.aspx?code=072727&P=072727PD&action=pdfdl&src=XOWEB (a guide produced by Learning and Skills Network (2007)

Unit 15: TVET development projects

Guidance/ Description

The future VET teacher must be able to take part in development projects relevant to new teacher roles, the teaching and learning activities, the development of the VET institution and the development of TVET education.

In this unit, the teacher trainee understands the concept of development projects in a political, organizational and pedagogical perspective

Distribution theory, practice, self-study

Theory: 30% Practice: 40% Self-studies: 30%

Learning outcomes

- 1. The teacher trainee understands the concept of development project and the related processes and tasks
- 2. The teacher trainee uses systematic assessment as institution development tool

Learning outcome No. 1

The teacher trainee understands the concept of development project and the related processes and tasks

Knowledge and understanding

The teacher trainee knows and understands:

- The political, organisational and pedagogical aspects of development work
- The principles of action-learning methods
- The phases in project work
- Organisation of project work (including project management)

Performance criteria

The teacher trainee is able to:

- Analyse a concrete development projects with regard to basic ideas and relate the projects to learning processes and societal development
- Perform action-learning methods
- Organise and perform project work

Learning environment

- The faculty offers lessons, exercises and training facilities in order develop the teacher trainee's knowledge, understanding and skills when it comes to teacher development with the help of colleague support
- The faculty provides learning environment (preferably as an example of best practice) that motivates learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods

• The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Learning outcome No. 2

The teacher trainee uses systematic assessment as institution development tool

Knowledge and understanding

The teacher trainee knows and understands:

- Assessment as a part of quality development and quality control
- Assessment as a institution development tool (including demands on validity, reliability, authencity, inclusion, transparency)
- Quantitative and qualitative assessment methods (such as interviews, questionnaires, focal groups, reflecting teams, role plays, etc.)
- How to interpret assessment results

Performance criteria

The teacher trainee is able to:

- Use different assessment tools
- Develop questionnaires and interpreting results
- Make the students evaluate their own outcome
- Make the students evaluate the teaching
- Use quality assurance methods and tools

Learning environment

- The faculty offers lessons, exercises and training facilities in order develop the teacher trainee's knowledge, understanding and skills when it comes to assessment as a institution development strategy
- The faculty provides a motivating learning environment (preferably as an example of best practice)
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods
- The teacher trainee has access to training possibilities at TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Assessment

The teacher trainee must provide evidence through either: 1. analysing a relevant development project extracting the most relevant ideas and relate them to learning processes and societal development, or 2. performing a small development project using action-learning methods

In addition, the teacher trainee must provide competence in reflection on development projects in his/her portfolio.

LEARNING PACKAGE CORRESPONDING TO UNIT 15

Principles of delivery

The teacher trainee is active in all three components of the unit: theory, practice and self-studies. In this way the teacher trainee practices student activating methods from his/her own experience.

The practice part in this unit consists of the teacher trainee's gathering of empiric data and training in the use of assessment methods.

The unit is problem based. That means that it takes a starting point in problems relevant to the teacher trainees when it comes to this special unit.

The unit is project oriented. That means that the teacher trainees' must have access to group facilities and that the teacher master trainer will be functioning as facilitator for the teacher trainees.

The unit focuses on developing the teacher trainee into a reflective practitioner. Therefore, it is important for the teacher master trainer to support the teacher trainee's reflections in the portfolio (as well in the current portfolio as in the presentation portfolio)

The learning outcomes will only be fulfilled if the teacher trainee is active in all the three learning contexts (the theory part, the practice part and the self-studies). Therefore it must be visible for the teacher trainee (be cooperation between the faculty and the TVET institution) that it is all part of the teacher training programme

It is strongly recommended that the teacher trainees organise themselves in study groups as the future TVET teachers must be able to work in teams – and as it will improve the learning processes especially in the self-study periods..

Part of the unit will be face-to-face education; part of the unit will be performed be communication via ICT communication channels.

Unit outline

To evaluate is a synthesis of description and reflections – on the basis of explicit values.

- Description is based on data from interviews, questionnaires, observations, written materials, surveys, tests, etc.
- Reflection means that you distance yourself from the description and interpret it in order to find patterns, connections, values, pedagogical views, etc.

The content is based on theories on assessment. The teacher trainee is trained in distinguishing between different purposes of assessment, whether it is a matter of:

- A. Control of the institution as such. For instance with the purpose of deciding whether a certain project shall continue or not
- B. Learning to find reasons for the state of things and possibly improve them.
- C. Information in order to create and share general knowledge
- D. Strategy/ tactics to evaluate at a certain time in order to provide documentation for something you already know and give legitimacy to decisions
- E. Symbolic you evaluate in order to evaluate, to demonstrate that the institution uses quality control
- F. Constitutional being aware that the assessment itself constitutes unintended consequences. Assessment has a forming effect:

The assessment might contain following aspects:

- The descent time time time time time time time tim				
	Self-assessment	Mutual assessment		
Teacher	Evaluates own teaching	Evaluates the students' outcome,		
		for instance marking		
Student	Evaluates own outcome, effort	Evaluates the teachers' use of		
	and participation	working forms, methods,		
		contents, etc.		

Working methods

The working methods are based on action learning method. Theory, methods and analysis are trained in exemplary learning activities. The teacher trainees experiment with development of assessment tools alone and in groups. Concrete examples and experiences from the institutions are included.

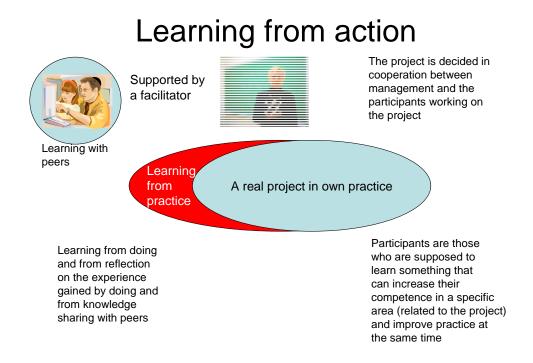
The contents of the self-studies are focused on reading of literature on assessment and experiments with performing interviews and questionnaires as a part of assessment, observations in practice and descriptions of relevant problems within the unit and in relation to own practice.

Relevant working methods are: study groups, experiments in own practice, observation of other's practice, visits to other institutions, documentation of own learning processes and self-evaluation.

The contents of the practice part are experiments with performance of assessment, as well self-evaluation as mutual assessment. Experience from practice is described in the portfolio.

Examples of working methods

Action Learning means in short that people learn from what they do. It can be illustrated like this:



Action Learning is experiential learning meaning that if people do something they get some experience, and if they also reflect on the experience they have a good chance to get a better knowledge so that they can do better next time (see further in the section about Activities).

It is very important to choose the right activity. It must be an activity of some strategic importance to the organisation (for instance the institution), and at the same time a useful instrument for acquiring the desired competence for the participant(s). The project must be difficult enough to ensure learning, but not so difficult that participants give up.

The facilitator must ensure that:

- Participants formulate their projects in such a way that improvement of competence and practice take place
- Reflection in action and on action is carried on both individuals and all participants in cooperation
- Assessment takes place based on both participants' presentation of results and the implementation in practice

The responsible manager is supposed to report back to the facilitator about implementation

Learning about Action Learning is an Action Learning project in itself. So teachers who would like to learn have to do it with real participants working on their real practice, together with real peers and in cooperation with their own management.

References

Literature

Brockbank, Anne & Ian McGill (2006) *The Action Learning Handbook: Powerful Techniques for Education, Professional Development and Training.* New York: Routledge-Falmer

Documents

Links

International Foundation for Action Learning (IFAL): http://www.ifal.org.uk/

Action Learning Associates:

http://www.actionlearningassociates.co.uk/

Action Learning and Action Research:

http://www.scu.edu.au/schools/gcm/ar/arp/actlearn.html

What is Action Learning:

http://www.permaculture.org.uk/mm.asp?mmfile=dipactionlearning

Action Learning (Revans):

http://www.12manage.com/methods revans action learning.html

Action Learning (homepage):

http://www.natpact.nhs.uk/cms/274.php

Organizational Learning Strategies:

http://www.humtech.com/opm/grtl/ols/ols2.cfm

Unit 16: The final project

Guidance/ Description

The future TVET teacher must be able to take part in development of the teacher role, the teaching and learning activities, the development of the TVET institution and development of VET education. In this final unit the teacher trainee makes a project based on a self-chosen theme within the framework of the TVET-TT programme. The project is carried out individually or in small groups and it ends up with a report.

The aim of the final project is to prove that the teacher trainee is able to analyse, synthesise, and put complex aspects of TVET into perspective.

Distribution theory, practice, self-study

Theory: 0%
Practice: 30%
Self-studies: 70%

Learning outcomes

1. The teacher trainee writes a final project within the framework of the TVET-TT programme

Learning outcome No. 1

The teacher trainee writes a final project within the framework of the TVET-TT programme

Knowledge and understanding

The teacher trainee knows and understands:

- All phases of a project work
- The importance of choosing a relevant theme and problem

Performance criteria

The teacher trainee is able to:

- Choose a relevant theme and problem
- Perform all phases of a project work
- Write a report
- Examine and analyse a vocational pedagogical aspect in relation to own practice
- Skills in describing and developing own practice on the basis of reflection and assessment

Learning environment

- The faculty provides environment (preferably as an example of best practice) that motivates learning
- The faculty offers access to a library and an updated electronic database on relevant literature
- The faculty provides an ICT communication channel for information, for mutual continuing debate, and for the teacher trainee's portfolio also in the self-study periods
- The teacher trainee has access to training possibilities at a TVET institutions

The importance of close connection between theory, practice, and self-study must be underlined

Assessment

The teacher trainee must provide evidence through the report that he/she can examine, analyse, present, and develop his/her own practice within the framework of the TVET-TT programme.

LEARNING PACKAGE CORRESPONDING TO UNIT 16

Principles of delivery

This unit is based on the teacher trainee's individual project work, demonstrating his/her competence in analysing, reflecting, and describing a self-chosen theme within the TVET-TT programme.

Unit outline

The content is focused on the final project. The individual teacher trainee chooses a relevant theme and problem (which the teacher master trainer accepts). The teacher trainee carries out the final project individually. The teacher master trainer acts as a coach and guide.

Working methods

The working methods are focused on each teacher trainee's chosen project theme. Concrete examples and experiences from the institutions are included.

Examples of working methods

An effective and efficient way to use Bended Learning which can be illustrated as follows:

Supported electronically by a facilitator





- 1. Introduction
- 2. Theory
- 3. Agreement

Project carried out in own practice

One day course delivered by a teacher educator (teacher adviser) Each participant carries out a project, concerning the content of the chosen unit, in own practice

Each participant writes a report about results and experience from the project.

Each participant communicates with peers and with colleagues

and/or management from own school

- 1. Presentations
- 2. Knowledgesharing
- 3. Assessment

Results and experience presented on the last day of the course.

If appropriate a formal Assessment takes place, based on report and presentation By doing this learning results will be better and more useful for both participants and the institution, and many more resources are used to ensure that – a facilitator, colleagues and peers, management, documents either on paper or electronic etc.

References Literature

Documents

Links

Personalised learning. Tutorials and peer mentoring: https://www.lsneducation.org.uk/user/login.aspx?code=072727&P=072727PD&action=pdfdl&src=XOWEB (a guide produced by Learning and Skills Network (2007)