Foreword: In connection with the development of the “VET Reform 2000” Ishøj Technical College (DK) developed a number of pedagogical issues, which were published as a booklet by the Ministry of Education in October 2001 “Student influence, teaching teams, and evaluation”. “Teaching teams” was presented in a workshop at the EVET conference in Sevilla 2002. Now the chapter on evaluation has been translated into English:

**From assessment of centimetres to evaluation of personal competencies.**

The aim of the project was to move the focus from technical assessment to a personal evaluation in order to strengthen the general and personal competencies of the student - especially with regard to competencies of learning. There is no doubt that a strongly individualised learning process is only possible if the student’s learning competencies are strengthened. The personal evaluation and the student’s ability of self-assessment with regard to learning processes are central issues in an individual educational plan. Without these mechanisms, the student is left to choose at random between a number of learning activities, and there will be no progression and consensus. Quality and flexibility in the learning activities are crucial. Flexibility gives the opportunity of adjusting and adapting the learning activities individually.

**New learning sequences**

Strengthening personal evaluation and learning competencies makes it necessary to re-structure and re-describe the whole learning sequence. Naturally, new ways of evaluation must be true to the specific aims of the education and the learning activities must still be holistic, but the student is given a number of choices within the activity itself, so that she can adjust, extend or limit the activity to an individual plan. When these choices are described there is a basis for working with her learning competencies and for her being able to evaluate her own learning processes.

This project will describe
- The description form of the learning sequences
- How to find the balance between the technical and personal evaluation
- The student’s self-evaluation
- How the student’s self-evaluation through the whole course is mirrored in the final evaluation.

**The student’s self-evaluation**

The superior aims of the self-evaluation are

The evaluation is meant to help the student’s learning development process. The evaluation must lead to concrete actions improving the student’s abilities of learning.
It is important that the aim of the evaluation is described
- There is a distinct definition of the criterions and values on the basis of which the student will be evaluated (In which areas does the student need to be better).
- There must be definite aims for what the student must learn
- The evaluation is systematic
- The evaluation makes the student understand her own learning process (what have I learned?), and makes her reflect on her own attitudes in the process (how did I learn?)
- The practical form of the evaluation is clearly defined
- The student reflects methodically so that she can make new actions and necessary changes.

Description form

**The project is described on the basis of the term** competence of action:

“**A person has competence of action when she is able to handle a definite work situation independently. She must be able to analyse the assignment, plan and execute it, and finally control her own work**”

The student is given much freedom in her choice of contents and methods and will learn to administer this through the self-evaluation (control of own work).

The fact that she must report back to her contact-teacher/tutor once a week and that it is mandatory to be part of a small student team ensures that she will evaluate her own learning processes the whole time.

**Project work**

The students are grouped in teams/study groups of 4 persons. These persons are responsible to each other through the whole module. They do not have to do the technical assignments/projects together, but they have to act as sparring partners in the personal development that takes place parallel to the technical development. The students in a team must help and support each other. At the start of a module they have to plan together, discuss the contents of the project and possible methods of doing the assignments. During the module the students must spar with each other in order to reflect on their technical development. The team is scheduled with a meeting each week, and here they also have to focus on their understanding of work discipline and motivation.

Evidently, this is training in co-operation: being responsible towards another, keeping appointments, and keeping deadlines. This makes the individual’s personal resources very visible:

- Who is good at what?
- Where are my strong and week points when working with others?
- Am I able to share my knowledge with others?
- Am I able to help a “weaker” student, possibly at my own expense?
- Thus the student has to be interested in what happens in the whole team, not only in her own development.
This team work is also an exercise in communication when the students have to explain to each other where they are in the learning process, and when one of them is making the status report on behalf of the group to the tutor. Thus it is also important that all students are present during the meetings with the tutor, so that they may correct if the spokesman has misunderstood something. At the same time they will understand how difficult it is to communicate needs and points of view on behalf of another person.

The students get practise in making specific, well-considered demands to themselves, to each other, and to the teacher when they often have to reflect on how much they have developed themselves, especially how and why they have developed and how they get on in the process.

The study group’s weekly meeting with the tutor is meant as a forum where the students can get guidance from the tutor in how to proceed, that is technically, personally, and as part of a group. The weekly meeting is an important part of the final evaluation of which qualifications and competencies the student has obtained. At the meetings it will also be assessed whether the student has the will to develop herself, the motivation to learn, and has the will and ability to co-operate.

In the descriptions of the projects it is important that the student is given much freedom to define her own needs for contents and methods. It is up to her to choose whether she will work on her own or together with others. This will help to assess the student’s ability and inclination to co-operation or individual work. It is the student’s decision in which form she wants to work with the project. This freedom appeals to the creative abilities of the student. It is also her decision which specific assignments in the project will have most weight. This may influence her obtaining the set aims of the module itself. This responsibility for your own learning process, this right to choose what to learn or not learn at a given time and the following consequences will strengthen the student’s independence.

In the descriptions of the projects it is also important that the student is able to evaluate her own work. She has to assess her own technical qualifications by setting the price for the final product, and she has to reason with this assessment in written form on a special evaluation paper. Together with her team she will then have to assess whether this price is realistic compared to the prices on the other products in the team, and finally this assessment has to be explained/defended to the teacher. The intention of this exercise is to find out how realistic the student is when assessing her own work and her ability to recognise her own strong and weak points. At the same time it is also an exercise in receiving and giving critique in the group in a diplomatic way, in order to get to an understanding and an agreement/compromise. Finally it is an exercise in communicating your ideas and attitudes to other persons.

Originally we had two independent projects, one a skirt at beginner’s level, the other a kimono at routine level. These two are now described as one project in the opinion that it
is the level of independence at which the student chooses method, contents and form that decides whether the solution of the project is at beginner’s, routine, or advanced level.

**Final evaluation of the module**

When the student has handed in her project, she must make a self-evaluation so that it becomes clear to her what she has learned or not learned by working with the project.

In the study group the students must reflect upon the following questions:

- How far am I?
- How did I get there?
- What could I have done in a different way?
- What more do I have to do?

These four questions you must discuss with your team. You have to evaluate your own and each other’s learning. This means that you have to check whether you have obtained the competencies, i.e. learned what had to be learned in the module. This is called self-evaluation and has to be described in the self-evaluation journal.

This is done in the following way:

In your educational handbook, chpt. 6, you will find the descriptions of all the subjects you have in the Basic Education Sequence. In the description you will find the competencies that you have to obtain in each module. Looking at these competencies, you find where in your project you think you have obtained this competence (learned what had to be learned).

An example: In the subject **Fashion Technology** one of the competencies is: **You can make a simple technical drawing.** So if you have made a correct technical drawing of your product, you have obtained this competence.

If you have only partly obtained this competence, i.e. you have made the drawing but it is not totally correct, then you have to describe what you have to do to make it correct in order to obtain the competence.

The self-evaluation journal must be handed to the teachers, who will use it as a basis for an evaluation talk with you at the end of the module. Thus you are not evaluated only in the way you have done your project, but also on how good you are at reflecting on your learning process, i.e. whether you can consider the four questions on the top of this page.
When the student looks at the aims and the descriptions of the competencies of all subjects in the module, she must be able to acknowledge how little or how much she has developed herself. In which areas this has happened, what she has done to obtain this development, what she may have failed to do, and how the obtained results fit to the aims, she had set for herself in the planning period of the project. If these questions are clear to the student it may be an important step for her to realise within which areas she has to change learning methods and attitudes: how to be better at receiving guidance, how to work with more self discipline, and how to be more co-operative.

This reflection on self-development demands much maturity and experience. This is why it is recommended that the exercise is done in the study group/team, because these students know each others’ learning activities through the weekly “reflection meetings”. Thus they may ascertain the relation between behaviour, learning methods, self-discipline, and the aims obtained.

The student writes a status quo report, which she must bring to the final evaluation of the module with the teachers/the tutor.

The student’s ability to evaluate her technical development and her ability to reflect on her personal competencies combined with an evaluation of whether the actual aims of the module have been obtained will be the basis for an action plan for her next step. Together with her tutor she makes sure that the experiences she has had until now will be used in the next module.

**Self-evaluation and the final assessment.**

The steps of the evaluation process:

A technical self-evaluation at the end of the module, which is presented to the teachers. The study group assesses this evaluation. This is the beginning of the personal evaluation. Writing the journal.

The final assessment of the module (student and tutor) is done on the basis of the above mentioned papers and the student’s oral presentation. This will be both a technical and a personal evaluation. Conclusions are written in the student’s educational handbook. The final assessment of the Basic Education Sequence (20 to 60 weeks) is done on the basis of the papers from all modules, but the final module has most weight. Together with her tutor the student makes a holistic evaluation. This is done on the basis of the final assessment and the student’s educational handbook.
A guide to project work

The assignment is handed out.
You and your study group read through the description carefully.
In the group you discuss things that may be difficult to understand,
and take notes on what you do not understand.
Each of you make notes on what you need to learn to be able to
complete the project.
Each of you make a list on how you will obtain this knowledge, i.e.
from literature, visits to museums, courses, etc.
You report this to your tutor and together you find out how
independently you want to and will be able to work.
Once a week (Wednesday afternoon) the team reports back to the
tutor. All must be present, and in turn one of you reports on behalf
of the whole team on the following issues:
How far is each of you in the learning process?
What have we done until now in order to obtain the knowledge we
need?
Which courses have we done and did we learn what we needed at
the courses? If not, please explain.
Could we have obtained the knowledge in another way?
Can the teachers help us, so that we benefit more from the courses?
How do we manage the planning? Do we get the guidance we need
for the planning?

Experiences of self-evaluation

Using self-evaluation as a method helps fulfilling several aims. Individual choices,
flexibility, and amplitude are of high priority in the VET Reform 2000. Of equal importance
are more independence and responsibility as competencies that must be developed in the
VET-programme. These elements are deeply inter-related, and it has been a challenge to
find out how to develop pedagogical methods to support these aims.

It is our belief that by using self-evaluation as a tool we strengthen the development of
the students’ personal competencies. During the implementation of the reform evaluation
and assessment has been a big issue all over the country. Many teachers have been
frustrated. Now they did not have one class in one classroom for 20 weeks, but students
at different levels in open learning centres in short modules. Flexibility and individuality
among the students made it difficult to feel sure that the assessment would be correct,
they felt. Having the 5-weeks’ modules made other teachers think that they had to grade
the students in sub-aims all the time.

Using self-evaluation both evaluation and assessment will be a progressive process. In the
form, we have lined up it puts the process in focus. Instead of having expectations of
being assessed and accepted by a teacher/a technical authority, the student now has a
tool to see herself in a technical and personal relation to fellow students.
Naturally, self-evaluation cannot stand on its own, but by connecting the self-evaluation to the tutor and to the final assessment of the module, we believe that we have created the serious foundation needed. This is supported by the way the whole evaluation is reflected in the final grading of all subjects and in the holistic evaluation at the end of the Basis Education Sequence.

Kim Jensen, 2001