## Video Talk 2: Good practice in assessing key competences

In this video, we will explore tools and approaches that are more effective at measuring key competences. We will first look at effective ways to assess knowledge, skills and attitudes in summative examinations. We will then turn to good practices in classroom-based formative assessments of student progress and understanding. And finally, we'll look at tools and practices to support assessments of transversal competences, such as creativity, initiative and the constructive management of feelings.

We'll start with a look at summative assessment of key competences. Traditional summative assessments are ill suited to measuring key competences. This is because they tend to measure fragments of content knowledge rather than what students understand about interconnections or the reasoning processes they use to solve problems. They are often more focused on theory than on real world applications.

Innovative tools, such as portfolio assessments, ICT-based assessments and simulations may be more effective at capturing students' reasoning processes or ability to solve complex problems.

A portfolio is a place to store data on student learning. It is compiled over time, and is intended to be representative of a learner's progress. These entries can contain information about learners' performances on tasks in real life contexts.

One concern with the use of portfolios for summative assessment is that it is very difficult to ensure that different scorers are consistent in how they mark student work. In other words, it is difficult to ensure the reliability of portfolio assessments. However, there is a great deal of interest in developing technologies to improve reliability.

E-portfolios may include audio-visual files and Internet links. As an example, students may use the multimedia functions of ICT to show how they would perform a physics experiment or some other problem-solving task. Developing and reviewing e-portfolios can help learners to develop digital competence, social competence, learning to learn and problem-solving skills. Students may use ICT-based platforms

for peer assessment and learning.

E-portfolio assessment has been used in a number of different countries, including Austria, Belgium, Bulgaria, France, Greece, Iceland, Portugal, Romania, Turkey, UK and the USA.

E-portfolios and other assessments that support interactivity and real-time feedback are also use for formative assessment. Formative assessment, is the kind of "real time" assessment teachers use to reveal how well students understand a new idea or are to apply a new skill – and provide the learner with feedback on what they still need to do to meet the learning objective.

"Low tech" approaches to formative assessment are also extremely effective. For example, through extended dialogues and series of questions, teachers may guide students toward deeper levels of understanding. Classroom dialogues may draw out thoughtful contributions and multiple points of view. Effective questions help to reveal students' level of understanding and identify possible misconceptions (in contrast to questions that are designed to elicit a

"yes" or "no" response or that stress recall rather than reasoning processes provide little information on the student's level of understanding and may hide errors in thinking).

Teachers may also gain insight into student thinking through observation, review of written work products and portfolios, student presentations, activities and projects, interviews, tests and quizzes. These different views on student work over time and in different contexts allow teachers to identify patterns in thinking and problem solving.

Feedback from teachers – as well as from other students – is also important.

Feedback is most effective when it is provided in a timely manner – "on the fly" = that is, during the course of an interaction, or within a few days of an assignment. But it is also important not to give feedback too quickly. Students may need some time to work out problems before referring to teachers or peers.

Feedback is also more effective when it is focused on the task at hand, rather than the student's ego – even in the form of praise. Task-based feedback includes specific suggestions for improvement. Good feedback is based upon clear

criteria regarding expectations for performance. It also includes as much or as little information as the students may need to make progress (that is, teachers "scaffold" feedback).

Teachers may also need to adjust their teaching, based on their observations. They should have a broad portfolio of methods and content to meet very diverse students' needs.

Formative assessment may be challenging to implement and teachers often cite barriers such as too many students, or overloaded curriculum. But teachers may also be strategic in how they address these barriers. For example, with large classes, teachers may divide them in two, with some learners working with online learning programmes, and another smaller group working with the teacher and their peers. Teachers may also help students to develop their own skills for self-assessment. Many teachers across European countries note that they feel they must rush through lessons in order to cover all the curriculum content. But teachers may decide which curriculum requirements are the most important and priortise these for learning.

These low–tech approaches reinforce effective use of high-tech tools that also may be used for formative assessment, such as classroom polling devices, educational video games, or interactive white boards. Internet social networks can also facilitate dialogue among students focused on solving a common problem. Students may use the platform to collaborate and to assess and building on each other's contributions.

The teacher's pedagogical skills, and skills for classroom management are the most important determinant of success when integrating new technologies.

Finally, let's look at students' self-assessment which is particularly relevant for transversal competences. This is really a new area for assessment. The major focus is on tracking individual student development, and on focusing attention on the importance of these skills for learning. As of yet, however, only a few tools have been piloted.

Tracking tools will be most effective when the learner has an opportunity to reflect with teachers as to how different transversal competences such as initiative, creativity and the constructive management of feelings support their learning and

personal development. It is also helpful for learners to reflect with teachers on the progress they have made.

Much more research and development will be needed to develop effective tools and approaches to assess transversal competences. This is an area where action research to test ideas and tools will be very important.

To summarize this session, assessments of key competences need, for example, to measure students' reasoning processes, understanding of interconnections, and ability to perform complex tasks. A number of new assessments, including portfolios and e-assessments provide more effective measures of students' key competence development. However, more work is needed to support reliability of these kinds of assessments.

Classroom-based formative assessments are also important for supporting key competence learning. Classroom dialogues and effective questions allow teachers and students to explore more complex ideas and processes. Finally, there is increasing interest in developing tools to assess students' transversal skills, focused on the student's personal development. But much more research will be needed in this area. Teachers have an important role to play through action research. Remember that you can access further reading and related resources to this session from our course library. We also encourage you to visit the course forum where you can take part in an ongoing discussion linked to this topic with fellow participants and instructors.