

## Assessment of students, teachers and schools

### Work file 3: Perspectives and forms of assessment

#### Assessment of learning processes (formative)

This perspective serves to improve, control and check on a student's learning process, or the student's and teacher's activities to achieve a certain objective.

#### Assessment of learning achievements (summative)

At a certain point in time, a conclusive assessment sums up the knowledge and skills that a student has acquired. Its main purpose is to inform, for example, the student or parents about the student's level of performance.

#### Prognostic assessment

This type looks at a student's future development. At different stages during a student's school career, people involved in a student's education process (students, teachers, parents, in some cases school psychologists and authorities) recommend how a student should continue his or her school career.

#### Assessment of learning processes

The main goal in the assessment of learning processes (or formative assessment) is to support the individual student. Thus, efficiency of teaching is improved. Instead of fighting the symptoms the underlying reasons for learning difficulties are being investigated and are being tackled (these reasons can be cognitive as well as emotional). Mistakes are not corrected but analysed. In this way the ideas and mindset of a student can be understood and supported in a goal-oriented way. Difficulties have to be discussed together with the student and can be dealt with by using special support measures or tasks. By analysing the source of mistakes, students do not have to adapt superficially. By analysing these sources of mistakes, students do not feel at the mercy of their difficulties. Instead, they learn how to develop individual strategies for facing their problems.

In this respect successful learning means a continuous steering of the learning process and working on mistakes by both – teacher and student – and not merely the search for the best methods.

Possibilities of assessment of learning processes:

- observations;
- small, everyday tests;
- tests after a long working phase.

Tests that assess learning processes act as an indicator for the teaching and learning process. They enable the students as well as the teachers to check the level of achievement. Gaps and insecurities can be filled with additional tasks.

Possibilities of testing:

- observing students while solving a task;
- accurate viewing and analysis of the completed tasks;
- individual conversations about completed tasks;
- asking questions about the way a problem was resolved;
- short tests.

Out of observations and conversations about the way of working on tasks and about the sources of mistakes individual goals arise that the students set themselves, that they work out together with the teacher or that the teacher can set for them.

When applying this kind of assessment in our teaching, the logical consequence is also a shift towards:

- goal-oriented learning instead of purely content-oriented learning;
- individualised teaching instead of teaching where everybody works on the same task.

### **Assessment of learning achievements**

Assessment of learning achievements (or summative assessment) gives an evaluation of a student's achievement in a nutshell. It sums up all acquired knowledge and competences. It acts as an instrument of feedback to the parents, the students and the teachers. It can be the basis of a goal-oriented support.

These kinds of assessments are used after long sequences of teaching and learning through observation and tests. They inform the different addressees to what degree the students have reached the different goals. Examples of assessment of learning achievements are all kinds of tests that ask for the students' accumulated knowledge or competences of a certain subject area over a certain period of time (for example, democracy quizzes, maths tests, vocabulary tests, social studies tests). Assessment of learning achievements is commonly used in schools in all subjects. Even though they are necessary for grading the students and give the teacher selective information about the students' overall performance, they bear various problems.

As a means of feedback grades are used. In connection with grades there are several unsolved problems:

- Different teachers evaluate the same student's product differently. Assessment is not objective. In this respect it is not relevant which subject it is. A maths test will be evaluated as differently by different teachers as a written story. Thus, assessment is strongly influenced by the teacher who evaluates. It can be a question of faith for a student and his or her individual future school career in which class and with which teacher he or she spends his/her school time. It can be stated that objectivity is not fulfilled as a criterion.
- A teacher tends to evaluate the same work of a student differently at different points in time. Assessment is not reliable. No matter which subject is the object of assessment, a teacher will evaluate differently at different points in time. It can be stated that the criterion of reliability is not fulfilled.
- It is not clearly defined what is expressed through a grade (skills, competences, knowledge, attitudes?). When teachers use grades in their assessment of achievements they integrate various aspects into the given grade, such as effective achievement in the past semester, estimated achievement ability, learning progress or deterioration in comparison to the class average and motivational, as well as disciplinary aspects. It is very difficult for the student to really find out what the given grade stands for. Usually, students do not know about the different assessment strategies of their teachers. Contents can be multidimensional and the space for interpretation can be big. Bearing in mind the different functions of grades in our society such as qualification, selection and allocation, interpreting given grades gets even more complex. It can be stated that the criterion of validity is not fulfilled. For most of the above functions grades according to an assessment of learning achievements are not usable indicators for future school, study or professional success.
- The common practice of grading according to an assessment of learning achievements has got a very important undesired effect: giving grades within a class according to a normal distribution leads to even more experiences of failure for the academically weaker students. Because the few places in a normal distribution for the very good and good ones are reserved for the same students, the same students will always remain on the other end of the scale. Even if they improve their academic achievement they will still remain at that end. Therefore, ranking the students according to their measured performance within the class will only lead to demotivation and loss of interest as situations remain unchangeable, especially for the weaker ones.

- Grades are not applicable to certain situations or phenomena: it may be simpler in subjects like mathematics to come to a right or wrong answer but it becomes more difficult in arts subjects or any other creative area of learning as well as language. This is due to missing or unclear criteria for evaluation and due to the fact that different subjects trigger different competences or skills. In EDC/HRE the discussion of different forms of solving a problem may lead to very creative or innovative ideas whereas in other subjects only one answer can be viewed as the correct one. So, there is the danger that grades, and the wish to be able to grade everything in an assessment of learning achievements method, can lead to uniformity. A creative search for new ways of solving the task cannot take place.
- Grading arithmetic is mathematically not valid: ideally, grades can be not more than rough estimates for an approximate rank of a student within his or her class. In this respect, even very accurate mathematical methods cannot serve as a means for improving this situation. Calculating the average of a grade by adding different grades and dividing again by the number of grades given can only serve as an additional source of security in a superficial way. It also depends on the time a grade was given. A student who started off the semester with a rather low grade and improved during the time should be evaluated differently from a student whose grades deteriorated during the semester. Even though the calculated average might be the same, the status of achievement and learning progress of these two students are not.

Following the above-mentioned problems, assessment of learning achievements should not be the only way of collecting information about the students' performance in EDC/HRE. Competences and skills that have been acquired by the students should also be measured by applying methods of formative assessment.

### **Prognostic assessment**

Prognostic assessments act as a means of estimation and prediction of the future career. Prognostic assessment combines basic aspects taken from an assessment of learning processes and an assessment of learning achievements and tries to formulate a diagnosis for the student's future. It asks questions like: how can we support the individual development and the positive learning processes? Prognostic assessments become very important at different stages in a student's academic life:

- school enrolment;
- repetition of a year;
- switching classes/schools;
- transfer to a different type of school (for example, special education);
- transfer to a higher school.

In this respect discussions have been going on for the past decades as to whether prognostic assessment can really be described as a form of assessment or can rather be viewed as a function of assessment.