

Quick Reference Card

Tips for constructing an exam and improving the exam quality

INTRODUCTORY INFORMATION

The information on this card provides tips to improve the exam quality. The tips are divided into tips for construction and tips based on three quality criteria which are central with exam development and assessment: validity, reliability and transparency.

- **Validity** is an indicator on the level at which the exam measures what it should measure. Does the examination correspond to the learning goals envisaged?
- **Reliability** is the indicator on the level at which the exam gives reliable results as a measuring instrument, regardless of the content of the exam. When an exam shows identical result in the same conditions, it is reliable.
- **Transparency** is an indicator on the level at which all necessary information is included to properly take and assess the exam, both with the student and assessor.

TIPS FOR CONSTRUCTING AN EXAM

- Start with the question: what exactly do I want to measure and know? The answer to this question, among others, is key to the exam form. Hereby the curriculum and qualification requirements are always determinative.
- Further develop the exam goals in an exam matrix and indicate which exam questions and/or exam assignments are linked to which exam goals. The exam matrix is a blue print of an exam in which you indicate what you want to measure.
- Think about the method of questioning/measuring in the exam. What exactly do you want to measure and for what purpose, is the starting point for this choice. For example, would you like to know how it stands with specific skills of the student? Then a multiple-choice exam is less obvious than a practical assignment/exam.
- When developing an exam start with noting down the expected answer or the result desired. After that, think about the question or assignment which leads to the expected answer or result.
- Develop an answering/assessment model for the exam with the correct answers or objective measurable assessment criteria. Set out the maximum score a student can achieve per question/assignment. When scale scores are applicable, you should set out the amount of points at the level of partial performance/answer. When working with assessment criteria it should be clearly indicated when the student satisfied the criteria.
- A proper exam is never developed alone and never at once. This also applies to people having much experience in exam construction. Screen the developed exam product by a colleague. For example, he overlooks whether the correct content is questioned, whether the questions are clear, whether the exam questions the correct things and whether the questions/assignments correspond to the level of the exam. After that, you adjust the questions/assignments, depending on the received feedback.

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TIPS TO IMPROVE THE VALIDITY OF THE EXAM

- before you start with the construction of exam questions and/or assignments, make an exam matrix;
- organize the learning goals: knowledge, skills and behaviour or an integration of it;
- select an adequate exam format with each learning goal;
- continuously link the content of the exam to elements of the curriculum or the quality requirements;
- have the exam checked by a colleague (professional and expert in the field of examination).

TIPS TO IMPROVE THE RELIABILITY OF THE EXAM

- objectivity: the questions and assignments are clear. The answer possibilities are unequivocal;
- specificity: the questions and assignments are asked in such a way, only the student who masters the theory properly can correctly answer them;
- difficulty: the questions and assignments are, in terms of difficulty, in line with the level of the student;
- differentiation: the questions and assignments and the exam as a whole draw a distinction between students who master the theory thoroughly and students who do not master the theory that thoroughly;
- exam length: the number of questions and assignments is large enough to rule out any strokes of luck.

TIPS TO IMPROVE THE TRANSPARENCY OF THE EXAM

- beforehand clarify what the exam is about, what kind of questions will be asked or what kind of assignments will be given;
- beforehand clarify what is expected of the student with regard to the level of knowledge and skills;
- beforehand clarify whether failed elements can be compensated with passed elements;
- beforehand clarify what the result of the exam can be, for example: passed, partly passed, redo certain elements, failed (resit the complete exam). The final result can also be expressed in marks;
- beforehand clarify how much time there is available to make the exam;
- beforehand clarify when the exam starts, when it ends and where the exam takes place;
- beforehand clarify which materials and tools the student can use during the exam;
- clarify to the student what performances are expected of the him with the questions and/or assignments in the exam;
- beforehand clarify to the student and examiner what the exam conditions are;
- beforehand clarify how the candidate is able to score (score card);
- beforehand clarify how many points the student can score in the exam;
- beforehand clarify the minimum score the candidate needs to attain to pass the exam (cutting score);
- clarify whether there a scale scores;
- clarify which score corresponds to which final score (standardisation).