



rijksuniversiteit
groningen

UG Assessment Policy

2021-2026

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Introduction

Introduction

In addition to determining whether students have achieved the intended learning outcomes, assessment also serves an important function in the learning process. Assessment provides students with information about the extent to which they possess knowledge and skills. Lecturers can use tests and exams to give advice (feedback) or to make adjustments to their own teaching. Recent years have seen rapid development in experience with digital and online modes of assessment and insight into the functions and embedding of assessment in teaching, also highlighting the impact on work pressure (use and development of modes of assessment) and quality assurance (cheating). Combined with the new 2021-2026 UG Strategic Plan and an evaluation of the previous Assessment Policy, these developments have given rise to an updated version of the UG Assessment Policy. The Assessment Policy is one of the key components of the University's teaching policy that must be present and up-to-date - in accordance with the institutional audit, WHW, and accreditation standards and guidelines.

Structure of the 2021-2026 UG Assessment Policy

The previous UG Assessment Policy, published in 2014, was evaluated by a committee in consultation with the faculties in 2019. The specific request was to evaluate and revise the policy and issue advice on implementation. The conclusion of this evaluation was that the previous policy largely sufficed. However, two main recommendations were issued with regard to revising the policy:

1. The University's Assessment Philosophy should be anchored more strongly in its Educational Philosophy, so that assessment can be better used as an instrument to promote learning and optimize teaching, rather than focusing solely on assuring the quality of degree certificates.
2. Internal quality assurance should be stimulated by clarifying the roles of administration and the Board of Examiners. Formative assessment should be used to ease the work pressure involved in summative tests and the associated resits, and to experiment with new intended learning outcomes (e.g. within the framework of employability and internationalization).

This version of the Assessment Policy was drawn up by a new committee to follow up on the evaluation held in 2019. The document starts with an Assessment Philosophy, which is linked to the Educational Philosophy in the UG Strategic Plan. Combined with the conclusions from the evaluation and experiences with assessment in recent years, this has resulted in an update to the Assessment Framework (Part A) and a set of Recommendations for development policy (Part B):

- A. **2021 Assessment Framework - Test Requirements.** Part A incorporates relevant sections of legislation, regulations, and accreditation standards, and aims to assure a standard level of assessment at the UG. For the sake of usability, Part A will provide explanatory notes to the Test Requirements, based on the structure of the previous UG Assessment Framework. The comprehensive Assessment Framework, which can be found in the Appendix, also discusses definitions, responsibilities, and principles for quality assurance, paying extra attention to digital and online assessment. Faculties and degree programmes are expected to implement the Assessment Framework and to satisfy the Test Requirements.
- B. **Recommendations for development policy.** Part B contains recommendations/advice for development policy, geared towards further developing the assessment philosophy by: stimulating successful innovations, pursuing UG strategic teaching aims, supporting lecturers and other staff, and improving collaboration. Part B can help faculties identify points of attention to implement the Assessment Framework and provides recommendations for pilot projects and expansion of University-wide support.

The UG Assessment Policy aims to improve teaching quality and achieve its educational philosophy using coherent policy actions and processes. Although individual components may help to decrease work pressure (shift towards assessment with less of a burden of accountability, clarification of roles and responsibilities, knowledge sharing), the work pressure may also increase (more development, more training, more feedback/supervision to give). Implementation takes time and resources.

Assessment Philosophy

The Assessment Philosophy consists of the question of *what* the UG wishes to achieve with assessment in the coming years, as well as *why* and *how*. It is linked to the UG's Educational Philosophy, as described in the [2021-2026 UG Strategic Plan](#): *'Student success (the personal and social maturation of the student's performance) and study success (effectively helping as many students as possible to obtain their degree) remain the main focus of our education system. We offer high-quality academic programmes in an inspiring community in which we connect our research with our teaching. We support our students to reach their full potential as academically trained experts; they gain the knowledge and skills to cross the borders of traditional disciplines and to contribute to solving complex scientific and societal problems in collaboration with others.'*

Principles and vision points (Why and What)

The UG's Educational Philosophy results in the following principles and vision points for assessment:

- To enable students to learn optimally, assessment will dovetail with the UG didactic concept, which pays attention to contextualized, active, and collaborative learning within an optimally designed learning environment with both on-campus and online (blended) learning activities. Our vision point is that assessment will integrally improve teaching quality.
- In order to train students to become academically educated citizens, teaching and assessment at the UG focus on the UG strategic teaching themes of Disciplinarity and interdisciplinarity, Blended learning, International focus, and Life-long development. Our vision point is that assessment will assure the acquisition of knowledge, understanding, and skills.
- To design teaching and assessment on the basis of a tight-knit academic community, attention will be paid to work pressure and clear frameworks will be set out for responsibilities and professionalism. Our vision point is that we jointly implement assessment on the basis of a quality culture.

Five focus areas (How)

In order to achieve the Assessment Philosophy, the Assessment Policy concentrates on five focus areas, incorporating the 2019 evaluation, accreditation standards and guidelines, academic insights into the functions and aims of assessment, as well as experiences, feedback, and insights from students and staff. The focus areas have been concretely translated into the updated Assessment Framework in Part A and recommendations for the longer term in Part B. The focus areas are:

- Individual responsibility
- Continuous assessment
- Learning with and from each other
- Digital and online assessment
- Organization and support

Focus area 1. Individual responsibility

The UG's quality culture allows and requires students to take responsibility for their own learning process. The UG aims to support students in doing this, without this resulting in more study pressure. Test design should activate students to work independently on expanding and deepening their academic knowledge and skills. Assessment should support students in their learning process and the effectiveness of their learning strategies, in a way that ties in with their academic development. When choosing a mode of assessment, a degree programme should not only consider a test's suitability in determining whether students have acquired the required knowledge or skills, but also look at whether it correctly informs and supports students in their learning process and the learning strategies applied. Further development towards authentic assessment is possible in this context: from closed to open answer categories, from closed book to open book, and from closed questions to formulating and researching own questions. With a view to employability, the acquisition of cross-curricular and interdisciplinary skills, both within and outside defined programmes, is also important.

Focus area 2. Continuous assessment

In order to achieve active learning, feedback will have to be embedded in the students' learning process. The literature shows that continuous assessment, i.e. combining formative and summative modes of assessment, has several advantages. These are mainly the result of the complementarity of summative modes (formal examination at the end of a learning process to check whether the intended learning outcomes have been achieved) and formative modes of assessment (informal testing during the learning process to inform students and lecturers of the degree of progress made and to define starting points for improvement). A stricter distinction between the various functions of assessment may result in more focus on feedback on the teaching process for students and lecturers, better distribution of assessment moments, and less emphasis on and work pressure related to summative examinations. High-quality formative assessment takes time, but may result in more effective teaching. Stimulating continuous assessment requires more explicit attention to formative assessment in assessment plans as well as support for lecturers (in terms of time, training, and knowledge sharing). The experiences gained in recent years can serve as valuable lessons here.

Focus area 3. Learning with and from each other

The UG Strategic Plan emphasizes active and collaborative learning, with attention paid by the organization to safeguarding skills that are developed in this way. Group work can be very valuable in teaching processes: working together enables people to learn with and from each other and is a key component of academic development and professional practice. A suitably designed course unit that is tailored to the students and their backgrounds can also enable working concretely on inclusiveness and/or interdisciplinarity. Pitfalls in group work include the risk of free-riding and the complexity of assessing and determining each individual student's contribution to the group result. This requires frameworks for organizing and assessing group work, as well as awareness, room and time to experiment, and support for lecturers who wish to use and assess group work in innovative ways.

Focus area 4. Digital and online assessment

In recent years, increasing use has been made of digital resources in assessment. A distinction must be made here between digital assessment and online assessment. Digital assessment takes place via computers on location (usually in the Aletta Jacobs examination hall), whereas online tests are not dependent on any location. Digital and online tests each have their own advantages, which the UG wishes to utilize in order to achieve an optimally developed learning environment with a combination of on-campus, on-site, and online teaching activities (Blended Learning) and thus ultimately improve the quality of teaching. Digital assessment can be used for a wide range of cognitive learning levels and offers unique advantages in terms of feedback, work pressure, and ease of use. Online tests have proven to be rather unsuitable for summative assessment at lower knowledge levels, mainly because they are rather susceptible to cheating. However, they do have several advantages: they are location-independent, less dependent on timetabling, and provide added value to authentic and formative modes of assessment (for example knowledge quizzes). Organization and quality assurance with regard to digital and online assessment are set out in the new Assessment Framework. In order to further utilize the advantages of digital and online assessment, investments will have to be made in professional development, time, support, and tools.

Focus area 5. Organization and support

The quality culture in terms of teaching and assessment requires clarity with regard to responsibilities and formal powers, also to prevent duplicate work. The evaluation recommended 'front-end stimulation (administration, strengthening the assessment cycle with accompanying protocols) and back-end investments (Boards of Examiners, professional development, and expansion of assessment quality assurance)'. The intended quality culture should also pay attention to the impact of policy on the work pressure experienced by students and staff members who are responsible for teaching and assessment. Based on this focus area, descriptions of responsibilities and definitions will be further elaborated in the Assessment Framework and recommendations will be made for training and knowledge sharing.

PART A. 2021 Assessment Framework - Test Requirements with explanatory notes

The Assessment Framework sets out aims for the quality of examinations and final assessments at the UG. The idea is that the Test Requirements set out in the Assessment Framework should enable degree programmes to satisfy the quality standards for assessment, with test design matching the degree programmes as closely as possible and providing room for context and the specific characteristics of faculties and degree programmes. The previous UG Test Requirements have been updated on the basis of the new Assessment Philosophy, the conclusions from the 2019 evaluation, and a consultation held in 2021. The Assessment Framework enables the University to satisfy national legislation, regulations, and [accreditation frameworks \(ESG and NVAO\)](#), and to direct its policy based on the UG educational philosophy. The term *Test Requirements* is used to highlight this strong link.

The structure of the new UG Assessment Framework is based on the previous edition from 2014. The considerations made in this update are explained in this Part A. For the sake of readability and usability, the complete new Assessment Framework has been attached to this document as [Appendix 1](#), including a list of Test Requirements, a questionnaire on quality criteria, definitions (incl. formative and summative assessment, degree programme assessment plan, and assessment programme), and an outline of responsibilities.

2021 Test Requirements with explanatory notes

The Test Requirements have been categorized into the same overarching themes from the previous version of the UG Assessment Framework, and will follow the same numbering in Part A in order to keep a good overview of changes. Test Requirements may have been maintained, **adapted (read text)**, or **newly added (highlighted in yellow)**. The themes are:

1. Subjects of assessment
2. Scheduling of assessment
3. Modes of assessment and test conditions
4. Examiners
5. Regulations
6. Quality assurance in assessment and assessment policy

1.1. Subjects of assessment

Learning outcomes, assessment and teaching form an integrated whole in accordance with the concept of *constructive alignment*. Student characteristics, learning goals, teaching activities, modes of assessment and educational achievements are geared to one another and students are encouraged to develop and use higher cognitive learning levels. Learning outcomes relate to knowledge, skills, behaviour, and the integration of these three elements. The learning outcomes determine the modes of assessment and the behaviour of students in accordance with the concept of *backwards design*. The educational achievements tie in with the level and orientation of the degree programme.

Documents

To ensure that a degree programme's learning outcomes are attained, an assessment programme and degree programme assessment plan must be compiled that dovetail with a coherent curriculum. The assessment programme should demonstrate the fit between the learning outcomes of the degree programme, the learning outcomes of the various course units and the assessment of these learning outcomes. The components of the assessment programme (see Appendix) are based on Article 7.13 of the Higher Education and Research Act (WHW), which deals with the content of the Teaching and Examination Regulations (OER). The assessment programme is part of/forms an appendix to the OER. For the sake of coherence and transparency, the assessment programme also forms part of the degree programme assessment plan. In addition to the assessment programme, the degree

programme assessment plan sets out procedures, criteria, responsibilities, as well as a substantiation of the assessment design. These should ideally be further elaborated at course unit level in coherent course unit assessment plans. The Board of Examiners will evaluate whether the learning outcomes can be achieved via the assessment programme, and assure the quality of the assessment plans and thus of the examinations and final assessments. The duties and powers of the Boards of Examiners are set out in the [UG Manual for Boards of Examiners](#), accompanied by the relevant WHW articles.

Description of learning outcomes

The previous edition of the Assessment Policy described the learning outcomes in accordance with the Dublin Descriptors, which the Accreditation Organisation of the Netherlands and Flanders (NVAO) used as a standard for degree programmes at that time. However, the Dublin Descriptors are optional in the [2018 NVAO framework](#). The Test Requirement has been adjusted in response to this.

Assessment of, for and as learning

Assessment is the most important instrument for informing students and lecturers of the progress that students make in their learning process. We can distinguish between summative and formative assessment, or between *assessment of, for and as learning* (McCallum & Milner, 2021). Summative assessment (*assessment of learning*) aims to determine to what extent a certain part of the learning process has been successfully completed. Lecturers compare aspects to a certain standard and determine a formal judgement (in marks, pass/fail), and subsequently provide their students with the necessary information. Formative assessment focuses on promoting the learning process (*assessment for learning*) by means of targeted information, feedback, and/or making adjustments to the supervision. This does not require a formal mark or judgement; the emphasis is on interaction and assessment as part of the teaching. Lecturers play a leading role in facilitating this mode of assessment and offering supervision, although they can use other sources, such as fellow students (peers), external experts, and technology (platforms and tools) to provide information or feedback. The third assessment category is *assessment as learning*. This mode of formative assessment provides students with the desired information about the progress they are making in their learning process via self-reflection and self-assessment based on individual or group assignments.

Distinguishing these three modes of assessment and the opportunities they offer will have consequences for various aspects of testing that are also discussed elsewhere in the Assessment Policy. Based on the new Assessment Philosophy, the UG would like to focus more on the function of assessment within the learning process, on the skills that are inherent to general academic development at the UG, and on helping students to take up a self-managing role in this. The explanatory notes in this Part A therefore pay ample attention to the formative function of assessment. A phrase has been added to the Test Requirements to explain that degree programme assessment plans should discuss the choices made in relation to the summative and formative functions of assessment. This will encourage degree programmes to substantiate why certain modes of assessment are applied and how various different modes of assessment can contribute to their teaching. One of the starting points here is the option to limit formal, summative assessment and the accompanying burden of accountability to *assessment of learning* and use more informal formative assessment with room for other modes of assessment for *assessment for* and *as learning*.

In accordance with the focus area of 'Individual responsibility', this section of the Assessment Framework should also discuss the effects of the chosen modes of assessment on students' self-managed learning behaviour. As Rowntree (1987) says: '*if we wish to discover the truth about an educational system, we must first look to its assessment procedures.*' Individual responsibility covers more than just disciplined study behaviour aimed at passing exams and completing a degree programme in good time. Partly for this reason, the acquisition of learning skills to enable students to independently continue their professional development became an integrated objective of university degree programmes when the Bachelor's – Master's system was introduced (Dublin descriptor 5).

Summative assessment promotes different behaviour than formative assessment. The fact that students are being assessed, as well as the moment when this happens, creates a type of pressure that will promote active learning behaviour in some students, while encouraging others to display opportunistic or undesirable study behaviour (e.g. procrastination, unhealthy peak loads, or cheating). This behaviour can only partially be influenced by means of adjustments to the summative assessment, such as monitoring, sanctions, choice of environmental factors, and frequency. Formative assessment in the form of mid-term exams will not automatically yield the desired study behaviour either (Buck et. al., 2010). Students have to learn to improve their learning achievements by reflecting and developing a reflection framework, for example using portfolios. However, they will need guidance to do so. Examples of formative assessment in this sense include portfolios and diagnostic tests at the beginning of a course unit, degree programme, or assignment, based on which students can plan their study behaviour and lecturers gain information on the level of prior knowledge. In order to design formative assessment in an effective way, where students are responsible for their own academic development, lecturers will need time to take on a more coaching role and will need access to support when implementing testing instruments, strategies, and techniques.

Gibbs and Simpson (2004) emphasize the importance of a comprehensive test design that encourages the desired study behaviour in terms of taking responsibility for the effort and time spent on the learning process. Formative assessment that is combined with frequent, timely, and good feedback and dovetails with the ultimate summative examination is an important component of the integrated whole of learning outcomes, assessment, and teaching. This will work best if modes of assessment are developed on the basis of learning outcomes (*backwards design*) and if there is consistency at both degree programme and course unit level. This calls for a broad approach in terms of design (by the degree programme) as well as implementation (by the lecturer/examiner) and assurance (by the Boards of Examiners). A phrase has therefore been added to the Test Requirement to emphasize that assessment plans must pay attention to the development of students' own responsibility for the learning process. The important role that the Board of Examiners plays in the quality assurance of assessment will be discussed in a separate Requirement.

Requirement 1. In order to ensure that the learning outcomes of the degree programme are attained, the Faculty Board must approve an assessment programme for each degree programme, aligning the learning outcomes of the degree programme, the learning outcomes of each course unit and assessment for each course unit. **The assessment programme forms part of the OER of the degree programme and of the degree programme assessment plan.**

Requirement 2. The Board of Examiners must assess whether the learning outcomes can be achieved via the assessment programme. **and monitor the quality of the assessment programme.**

Requirement 3. **The learning outcomes of the degree programme and of the individual course units must tie in with the level and orientation of the degree programme. The domain-specific framework of reference, the profile of the degree programme, and its international embedding, for example as described on the basis of the Dublin Descriptors, form the starting points. The Dublin Descriptors, together with the domain-specific framework of reference, the profile of the degree programme and its international embedding, form the starting points for determining the learning outcomes of the degree programme and of the individual course units.**

NEW: Choices made in relation to the summative and formative functions of assessment must be described in the degree programme assessment plan and any course unit assessment plans that are in place, with reference to promoting students' learning process.

NEW The Board of Examiners must assure the quality of the assessment programme, the degree programme assessment plan and any course unit assessment plans that are in place.

1.2. Scheduling of assessment

Tests must be optimally distributed over the duration of the course unit, and clashes with teaching or other tests must be kept to a minimum.

Continuous assessment: combination of formative-summative

Traditionally, the UG has primarily worked with summative final tests. The primary aim of these tests, which are used to conclude a learning process, is to determine to what extent the intended learning outcomes have been achieved (Sluijsmans & Kneyber, 2016). Examples include examinations with open and closed questions, papers or theses, and final presentations. Formative assessment, on the other hand, aims to test students *as they learn*, with the primary aim of supporting the learning process (Sluijsmans & Kneyber, 2016). Examples include interim (peer) feedback and knowledge quizzes, as well as low-threshold modes such as asking discussion questions during a lecture to check where students are in the learning process and where the gaps in their knowledge and/or skills are. Formative assessment requires investments in time and effort on the part of the lecturer. The extent of this investment depends on which formative mode of assessment the lecturer wants to implement. For example, providing written feedback on a mid-term product will require a much bigger investment than adding discussion questions to a lecture. Both forms of assessment can make teaching more effective for both students and lecturers. Formative assessment does not involve official marks, so the burden of accountability is lower than for summative (partial) exams.

Teaching in general is increasingly gearing towards the latter function of assessment: a shift is taking place from an assessment culture to a feedback culture (Van Silfhout, 2016). Several initiatives have already been taken within the UG to stimulate formative assessment.¹ The 2019 evaluation also included the recommendation to focus more on a good balance between formative and summative assessment. The use of formative assessment was accelerated during the coronavirus pandemic. A survey among lecturers in April 2021 showed that 40% of respondents had increased their use of formative modes of assessment since the start of the pandemic (UG Teaching Action Plan Survey, April 2021). Of these respondents, 69% indicated that they agreed with the statement that formative assessment contributes to better learning outcomes for students (27% neutral, 4% disagreed). In addition, 71% of respondents indicated that they enjoyed using formative modes of assessment (23% neutral, 5% disagreed). This image was also confirmed in discussions with Boards of Examiners.

Definition of continuous assessment

Given the strongly increased interest in using formative modes of assessment alongside the existing summative ones, it is important to consider the effect of combining the two modes. This combination can be regarded as a form of *continuous assessment*, an approach that consists of combining several formative and/or summative modes of assessment during a course unit or during a degree programme. Even simply setting more frequent summative tests (for example by using partial examinations instead of one final exam) may be beneficial, as it encourages students to interact with the learning material more often and at different moments (Larsen, Butler & Roediger, 2008; Cole & Spence, 2012). However, one disadvantage of frequent summative tests is that they may increase stress levels in students (Van der Vleuten, Schuwirth, Driessen, Govaerts & Heeneman, 2015). In addition, they may lead to a higher burden of accountability for lecturers, and leave the advantages of formative modes of assessment unexploited. Adding informal formative test moments will help students to acquire a deeper understanding of the study material, without necessarily feeling the pressure that would result from adding more summative tests (if the preconditions are satisfied). The term 'continuous assessment' is mainly used to denote a combination of formative and summative modes of assessment (Hernández, 2012; Le Grange & Reddy, 1998), because the complementary functions of these two modes appear to have the greatest advantages.

¹ This was a recommendation in the 2014 Assessment Framework. Best practices were exchanged in 2016. For the 2015-2020 Strategic Plan, faculties were asked to describe plans for formative assessment in their strategic plans.

Advantages of continuous assessment

Continuous assessment is associated with a more distributed learning effort throughout a course unit and will result in deeper learning, greater motivation, and as a result, a better understanding of the study material among students (Van der Vleuten, 2000; Butler & Roediger, 2007). Many of these advantages are the result of the potential positive effects of formative assessment. Advantages include longer retention: by repeatedly revising the study material, students will remember it better and longer than by cramming for an exam (Butler & Roediger, 2007). In addition, continuous assessment will improve student motivation (Van der Vleuten, 2000, Butler & Roediger, 2007) and lead to better results in the summative final examination (Van Gaal & De Ridder, 2013, Cole & Spence, 2012).

Consequences of combining formative-summative for scheduling of assessment

The combination of formative and summative assessment raises questions about the distribution of tests during course units as well as during a degree programme. The scheduling of assessment is described in the assessment programme and the degree programme assessment plan (avoiding clashes with other course units) and possibly the course unit assessment plan. However, scheduling relates not only to coordinating test moments (the time dimension) but also to coordinating modes of assessment and the necessary variation and available options. Variation in assessment is important as it helps to better measure student progress and to inform students and lecturers of this progress. The modes of assessment should be determined by the learning outcomes.

Formative tests cannot be used in the same way at every degree programme. In addition, it takes time, practice, and support. The experiences gained during the coronavirus pandemic emphasize the importance of clear and well-coordinated scheduling. Any changes in modes of assessment will have to be properly coordinated between lecturers whose course units coincide to prevent high student peak loads, frustration, and even negative effects. The effects of formative assessment will be most positive if the assessment quality is in order and if lecturers use the assessment with the aim of adjusting their teaching. The adapted Test Requirement on scheduling aims to encourage degree programmes to prevent time clashes and create variation in modes of assessment. Crucial elements in this context include consultation between lecturers to prevent peak loads for students and active communication towards students, coordinators, and lecturers.

Scheduling resits

The 2014 UG Assessment Policy stated that resits should not be timetabled during regular teaching and exam periods: 'Timetabling resits outside the regular teaching and exam periods will encourage those students who have the ability to pass their exams in one go to do so at the regular assessment times. Students who need more time for their studies should certainly not be spending time on resits during their regular teaching periods. Testing in the summer period is a good idea to this end.' The 2019 evaluation stated the following: 'Even though the faculties did not score low on the requirements themselves, the discussions showed that they were interpreted differently than the Assessment Committee had intended.'

The recommendation to schedule resits in the summer period will be maintained. However, spreading examinations and resits affects key processes in teaching. A broad discussion is required here. Resits currently can be, and are, scheduled outside the summer period as well, either with an eye to practical feasibility and work pressure or for other reasons. This may, however, make it attractive for students to sit the original exam without preparing properly, simply to find out which topics the exam focuses on and which material they will have to study more, and subsequently use this information to prepare for the resit, if this is scheduled at a time that is insufficiently unattractive for students. As a result, clashes with regular teaching and examinations may still occur. More formative tests could help to make teaching better and more effective. The idea here is that (non-compulsory) interim assessments and feedback will improve students' own responsibility and intrinsic motivation. This is expected to improve success rates in summative final exams and decrease the numbers of participants in resits, which in turn may reduce the work pressure involved in resits.

Compensation regulations

As a result of the policy to promote active studying, assessment is increasingly performed during course units, resulting in formative feedback, possibly an (aggregate) assignment mark, and an examination mark that may be based on summative partial exams and/or a summative final exam. No official University policy has been drawn up about how students can compensate for ('repair') uncompleted components of a course unit. A new Test Requirement is based on the principle that there must be a regulation to give students a realistic opportunity to complete a course unit within the relevant academic year, and that procedures for summative partial exams must be defined.

Requirement 4. Formative and/or summative tests must be scheduled in such a way that students are assessed frequently and in a variety of ways. Tests must be optimally distributed over the duration of course units, in such a way that clashes with other course units are kept to a minimum. ~~The assessment programme must be structured so that students are frequently tested and that the tests do not clash with other course units. Assessment should be distributed throughout the course unit.~~

Requirement 5. Resits must be timetabled at moments that clash as little as possible with regular teaching and examinations. Resit timetabling must be such that students find it more attractive to make the required study effort for the regular exam.

NEW The degree programme must draw up regulations that set out how unsatisfactory final marks on course units can be compensated, so that students can, if possible, still complete the course unit within the relevant academic year. These regulations must define whether and, if so, how any compulsory mid-term summative tests can be compensated.

1.3. Modes of assessment and test conditions

Modes of assessment must be varied and must tie in with that which is being tested. Summative tests must satisfy the conditions of validity, reliability and transparency (dovetailing with the NVAO frameworks).

Modes of assessment must reflect the content and level of the learning outcome (*backwards design*). The choice of mode of assessment must be explained, for example in the degree programme or course unit assessment plan. The conditions that must be set for summative assessment go beyond correctly determining marks. The quality criteria are therefore reinterpreted at test level into:

- **Validity:** the degree to which the test reflects the learning outcomes and attainment level of the course unit. Test questions may therefore not go above or beyond the learning outcomes of the course unit. Test questions may be limited to a subset of learning outcomes of the course unit, as long as the other learning outcomes are assessed in another test for the same course unit. An assessment matrix (test specification) is a tool that can be used to assure the validity of a test prior to administering it.
- **Reliability:** development of marks based on test results. The test must enable the assessor to make a reliable judgement on the extent to which students have attained the learning outcomes of the relevant course unit. Use of a *rubric* and anonymous marking are tools that can be used to assure the reliability of tests during the marking phase.
- **Transparency:** the degree to which the process and content of testing and assessment are clear. The degree programme assessment plan and/or, if relevant, the course unit assessment plan, may indicate which formative and summative assessments are included in the course unit, which learning outcomes a test focuses on, how long a test takes, how marks are determined, how the test result counts towards the final mark for the course unit, and how feedback and inspection are arranged.

A [questionnaire on quality criteria at test level](#) can be used as a tool to check the conditions. This questionnaire can also be found in an Appendix to the UG Manual for Board of Examiners.

Requirement 6. Each test must be as valid, reliable and transparent as possible. ~~The choice of mode of assessment must be explained. The choice of mode of assessment must be explained in the assessment programme.~~

1.4. Examiners

The examiner is responsible for the student assessments. Examiners must satisfy the requirements set by the degree programme. The Board of Examiners is responsible for the quality of examiners.

Competence of examiners

Examiners are responsible for administering summative examinations and determining their results. They assess students' work. Each individual examiner's responsibilities cover matters such as test design and taking decisions with regard to the question of whether a student has satisfied the learning outcomes of the course unit in question. The examiner is responsible for the content and form of the tests. Lecturers can follow modules on professional development in the field of assessment at ESI. Assessment is also part of the University Teaching Qualification (UTQ). In accordance with the WHW, the Board of Examiners of the degree programme to which a certain course unit belongs is authorized to appoint examiners for this course unit. Appointing examiners is one of the most important instruments that a Board of Examiners has at its disposal for the assurance of quality in examinations. In accordance with the UG Assessment Policy, the Board of Examiners is therefore expected to assess whether prospective examiners are indeed suitable to fulfil this task. Although the Manual for Boards of Examiners lists several general criteria, the Board of Examiners bears final responsibility for appointing examiners. The Board of Examiners can also, as a last resort, withdraw the appointment of an examiner who does not perform properly. The role of the Board of Examiners is explained more clearly in the adjusted Test Requirement.

Consulting third parties

The UG aims to encourage external knowledge and expertise to be included in students' learning process – and therefore also in the assessment. The evaluation of the previous UG Assessment Policy and consultation of stakeholders have shown that more frameworks are desired for this topic. A new Test Requirement has therefore been added. In accordance with the WHW, the examiner has the exclusive authority to administer examinations and determine results. However, to facilitate assessment, the examiner is permitted to consult third parties (student assistants or people outside the degree programme, for example in the professional field). Third parties do not have assessment authority but can provide information. The role of a third party in an assessment process must be explicitly stated, and it must be clear to students in advance which type of information will be requested, for example by using an advice form. Students have the right to take note of the names of third parties who have been consulted, for example via the assessment form.

Assessment of group work

The 2019 evaluation and the theme of 'collaboration' in the UG Educational Philosophy have indicated that group work is a topic that deserves extra attention. Formative assessment must take place during group work and there must be clear guidelines for marking, bearing in mind the advantages and disadvantages of modes of assessment.² When assessing group work, a distinction may have to be made between the process and the quality of the product. Summative group assignments should be assessed on the basis of information about the extent to which learning outcomes (contribution to process and product) were achieved by individual students. The individual component in group work must be sufficiently expressed. The necessary information can be collected by asking students to evaluate their own contribution and/or the contributions of their fellow students to the process and the product. A Test Requirement has been added for assessment of group work.

Requirement 7. Each examiner must be declared fit **by the Board of Examiners of the degree programme** for their specific role in the examination programme.

² For example the [framework described on the website of Carnegie Mellon University](#): From Winchester-Seeto, T. (April, 2002). *Assessment of collaborative work – collaboration versus assessment*. Invited paper presented at the Annual Uniserve Science Symposium, The University of Sydney

NEW: Examiners may consult third parties to facilitate assessment. Third parties have no assessment authority and can only give information. Students have the right to know, prior to the test, which information will be requested from third parties, and, after the assessment, which third parties have been consulted.

NEW: The examiner has the exclusive authority to perform summative assessment in the context of group assignments. Group members are individually assessed, which means that their mark may be different from the marks of their fellow group members.

1.5. Regulations

Students must be provided with full and clear information about assessment in their degree programme via the Teaching and Examination Regulations (OER) and the Rules and Regulations. Rules must be set out in relation to pass marks and their calculation method.

Transparency

Students must be provided with information about assessment in their degree programme. This requires transparent regulations that are set out in the OER and the Rules and Regulations of the Board of Examiners in accordance with the Higher Education and Research Act. The OER list the course units with their number of ECTS credit points, mode of assessment, sequence requirements, resit opportunities, right of inspection, admission requirements, etc. The regulations for practical implementation are discussed in the Rules and Regulations. Rules must be set out in relation to the pass mark system used. These rules must be formulated in such a way that they cannot result in misunderstandings. The various documents and their content are further [defined in Appendix 1](#).

Setting the pass mark

Assessment must be sufficiently independent. Procedures concerning pass marks can help to assure this independence in summative tests. Although the examiner is responsible for the pass mark system used, the Board of Examiners must be able to assure this system. The 2019 evaluation stated the following: 'All faculties would like to have a substantiated pass mark system for tests. A statement to the effect that at least x% of the total number of points must be gained in order to pass an examination is usually in place, as is an overview of the number of points available for each question. A substantiated pass mark system, however, is often missing. In addition, pass marks are sometimes difficult to substantiate, in particular for essay questions. Rubrics could be a solution to this problem.' The previous Test Requirement concerning pass marks had a wide variety of interpretations and lacked the necessity of substantiating and documenting modifications in the pass mark system. The updated version states that both absolute and relative pass marks as well as combinations thereof are permitted, as long as they are set out and substantiated in advance. Risk mitigating measures are recommended if there is an effect of chance involved. The effect of chance in a test with closed questions can only be determined once the number of questions and the n of answer options for each question are known, but must be taken into account when calculating the pass mark.³ The same applies to the value assigned to incorrect answers when using *negative marking*. The standard value is $1/(1-n)$. In addition, pass marks can take into account the difficulty level of the test, which can be determined in advance (by an expert) or retrospectively (based on the test result). For essay questions, the pass mark system can be substantiated using rubrics connecting to learning outcomes.

Requirement 8. The pass mark system (**absolute, relative, or a combination**) must be justified and approved in advance, **and students and the Board of Examiners must be informed afterwards of the pass mark that has been applied.**

³ A good substantiation is necessary for relative pass marks that take the effect of chance into account. The effect of chance can also be taken into account in other ways. For example, the *Modified Cohen* method offers the possibility to use different question types in multiple choice tests, for instance in a digital setting. (Celia A. Taylor (2011) Development of a modified Cohen method of standard setting, *Medical Teacher*, 33:12, e678-e682.)

1.6. Quality assurance in assessment and assessment policy

Each degree programme's assessment plan must set out how assessment works as an instrument to guide behaviour and assess learning achievements. Responsibilities in terms of implementation, analysis, and periodical evaluation must be determined and set out in protocols. Assessment must be sufficiently independent. Extra attention must be paid to the assessment of final projects, given their importance to students. Relevant assessment material must be archived.

Assessment protocols and transparency

The 2019 evaluation and the 2021 consultation have shown that the visibility of assessment should be increased in order to inform lecturers and students more actively about assessment and make the assessment process more transparent. Although almost all faculties have protocols in place to this end, these protocols do not always comprise all the relevant phases (compilation, administering, assessment, and analysis) and modes of assessment (formative and summative, on-campus and online, oral and written). The coronavirus pandemic has given rise to developments in this field to help coordinate new modes of assessment. Lecturers need clear assessment protocols, and there is also a need for mutual consultation within and between faculties. Increased visibility of relevant documents can help, and a phrase to this end has therefore been added to the Test Requirement.

Assessment of final projects

Given their importance to students, extra attention is paid in this Assessment Framework to the assessment of final projects (thesis, portfolio, internship/placement, etc.) and the relevant Test Requirements have been updated. Whereas the previous Assessment Framework only referred to 'thesis', as a result of the increase in other modes of assessment, and in keeping with NVAO terminology, the term used is now 'final project'. The previous version of the Assessment Policy recommended having the research or project design that was to culminate in the final project approved by both examiners at an early stage. It is not set out in the accreditation standards that examiners are required to conduct formal assessments at any early stage during the process of creating the final project. Moreover, this concerns the task definition of examiners and Boards of Examiners. However, approving a research design or project may form part of formative assessment and the subsequent supervision, and is therefore recommended.

The evaluation and consultation show that there is some confusion about the safeguarding of independence of examiners and the use of assessment forms for final projects. Independence is necessary from the perspective of the quality of assessment. Examiners are appointed by the Board of Examiners of the degree programme and must first make their own individual assessment, which they subsequently discuss to arrive at a joint final judgement (mark, result) of a final project. They may consult third parties to this end. When appointing examiners for final projects, their independence towards both each other and the students must be monitored. From this perspective, permanent assessments duos are undesirable, as are examiners and third parties who are connected to students or their family through channels outside the degree programme. Each examiner independently makes a partial judgement, upon which they jointly arrive at a final assessment of the final project, which they substantiate using one single assessment form that is signed by all assessors and subsequently communicated to the student. The assessment form must contain a substantiation and also discuss the learning process, rather than merely stating a mark. There is room on the assessment form for examiners to provide their own explanations and thus optimally use this feedback opportunity. The individual examiners' preliminary assessments do not have to be formally recorded. However, it is recommended to have a protocol for working with the assessment form, particularly in cases where the examiners are unable to arrive at a unanimous assessment (for example that a third assessment will always be conducted if the individual assessments differ by more than 1.5 points). Students have the right to receive a unanimous assessment, so there must be a protocol that sets out how to deal with situations like these.

In summary, the updated Requirement on assessing final projects sets out that students are provided with one single assessment form that has been completed jointly yet independently by the assessors to prevent confusion about the final assessment.

Archiving assessment material

In order to prove the quality of assessment to external and internal committees, all assessment material, written tests, marking protocols, the students' answer sheets, and the actual assessments (with the required justification depending on the test) must be archived. The 2019 evaluation shows that clear archiving systems for final projects are generally in place at the faculties. It was not always clear which other assessment material should be archived, how, and how long. The UG adheres to the legal requirements for archiving as set out in the *Selectielijst Universiteiten en Universitair Medische Centra*.⁴ This list describes processes, actors, foundations, information objects, storage terms, and any relevant comments. Archiving in accordance with the *Selectielijst* has therefore been added to the Test Requirement. Within the framework of the DITO2020 project (see also the [description of digital assessment in the Appendix](#)), a process of digital archiving of tests in the electronic learning environment has been completed, which means that processes and facilities for archiving digital examination material are now organized at a central level.

Requirement 9. Each degree programme must have a **degree programme** assessment plan that reflects that assessment is seen as an instrument for influencing student behaviour and lists both the parties responsible for its implementation and the method of regular evaluation. **The degree programme assessment plan, any course unit assessment plans, and the OER of the degree programme must be made available in public locations that are accessible to both students and lecturers. The Rules and Regulations of the Board of Examiners must be actively shared once a year with the examiners involved.**

Requirement 10. For each degree programme there must be protocols for compiling, administering, assessing, and analysing tests.

Requirement 11. Examiners must consult their peers when constructing **summative** tests, and the Board of Examiners must monitor this process.

Requirement 12. Bachelor's and Master's theses must be assessed by **at least two examiners**. Each examiner must issue an independent assessment, **upon which the assessments are combined into one joint result**.

Requirement 13. **A final project is assessed using one single assessment form, which contains a mark as well as explanatory notes to the assessment, and which also lists any third parties that have provided information to facilitate the assessment. Assessment forms must be archived. Theses must be assessed using assessment forms, which must be archived.**

Requirement 14. **Each student will receive an individual assessment of their final project. Students' theses must be individually assessed.**

Requirement 15. An archiving system must be in place for all relevant assessment material **in accordance with the *Selectielijst Universiteiten en Universitair Medische Centra***. The required documentation, the archiving method and the parties responsible for archiving must be defined in a protocol or in the **degree programme** assessment plan.

⁴ *Selectielijst Universiteiten en Universitair Medische Centra. Version 2020 (14 November 2019)*: and more specifically Chapter 2.2.4 *Onderwijs – Toetsing en beoordeling* [Teaching – Testing and assessment] (p. 33 ff.).

PART B. Recommendations for development policy

Part B of the Assessment Policy contains recommendations/advice for development policy, geared towards further developing the assessment philosophy by: stimulating successful innovations, pursuing UG strategic teaching goals, supporting lecturers and other staff, and improving collaboration. Part B can help faculties identify points of attention to implement the Assessment Framework and provides recommendations for pilot projects and expansion of University-wide support.

Focus area 1. Individual responsibility

The UG aims to encourage students to take responsibility for the acquisition of academic knowledge and skills and thus, ultimately, for their own employability. All degree programmes taught at the UG have been designed on the basis of learning outcomes with a programme-specific implementation that make the level of the degree programme recognizable. The learning outcomes are achieved in course units with specific *intended learning outcomes*, all of which are assessed. The UG encourages faculties to offer curricular and extracurricular activities to promote students' job-related skills and thereby increase their employability. This enables students to further develop their *graduate attributes* (Barrie, 2012). Graduate attributes are the qualities and competences that graduates possess upon successful completion of a UG degree programme. These attributes have not been formulated for each specific degree programme but may be the result of the disciplinary knowledge, research skills, and academic skills that are acquired within and outside course units. Students can distinguish themselves with their own set of graduate attributes and thereby take control of their further development.

With a view to accreditation of degree programmes, the degree programme management must decide how academic skills, individual responsibility, and their development in the course of the programme could be demonstrated and archived. Progress can be monitored via development portfolios, demonstration portfolios, or assessment portfolios. More degree programme-specific standards and criteria will have to be developed for determining development. An added advantage of a focus on archiving evidence of realized academic skills development is that it provides quality assurance within degree programmes with a suitable framework for evaluating the contributions of individual course units to cross-curricular skills goals, and provides information to help update and improve the curriculum.

Life-long development is another UG teaching theme that is related to individual responsibility. The Strategic Plan mentions explaining the value of the course units followed by a student more clearly towards students and society. Assessment can provide insight into this value, but it is currently mainly focused on completing course units in the context of an entire degree programme – the essence of teaching at the UG. If components and skills are to be made more transparent, this UG teaching theme will have consequences for assessment policy in a broader sense: it requires stronger embedding of societal context and different disciplines, so that the professional field and other disciplines can receive a suitable role in the assessment process. The UG assessment policy mainly focuses on monitoring the quality of testing, testing processes and assessment. The minimum threshold, i.e. the minimum requirements that must be satisfied in order to successfully complete a course unit, is monitored, and the level, i.e. mark, is determined by the intended learning outcomes of the course unit. Much less attention is paid to obtaining evidence of the acquisition of specific graduate attributes, such as certain academic or social skills and ethical or professional conduct. It is therefore recommended for the University to give students more responsibility for acquiring and demonstrating cross-curricular graduate attributes and to provide them with the necessary facilities to do so. *Microcredentials* can be of particular help here.

Recommendations for focus area 1 - Individual responsibility

1.1 Lecturer training and professional development programmes, such as the UTQ, should focus more on the effects that modes of assessment have on the responsibility that students take for their own academic development and employability.

1.2 Establish pilot projects to study how course units and degree programmes can provide information about how they contribute to a pre-defined set of graduate attributes, with an e-portfolio containing evidence of academic development and employability from the regular course units/degree programmes. This would provide students with a personal e-portfolio, to which they could add their own evidence of activities, results, and products that contribute to specific graduate attributes.

1.3 Look into how the degree certificate predicate on the diploma supplement may be expanded with a set of graduate attributes alongside the electives followed. The current diploma supplement does not provide any room for this.

1.4 Use the pilot projects on microcredentials that are currently being held within the framework of the Versnellingsplan and ENLIGHT to gain insight into the embedding and role division with regard to assigning microcredentials and the quality frameworks that apply in this context. Specific attention should be paid to the responsibilities and powers of everyone involved in the process.

Focus area 2. Continuous assessment

As discussed in Part A, continuous assessment can have positive effects as a result of the combination of formative and summative modes of assessment. However, certain preconditions do apply here:

- The test design must be based on the learning outcomes. This will ensure that students are assisted in achieving the learning outcomes. The modes of assessment are determined by the learning outcomes of each individual course unit.
- Sufficient time and resources must be made available for:
 - lecturers: they need time to develop (mostly new) formative modes of assessment, and possibly to adjust summative modes of assessment, and subsequently to implement them. For example, marking and giving feedback on written work or quizzes takes a lot of time, also because the feedback must be useful for students. The positive effects of continuous assessment can only be achieved if lecturers are given sufficient time to design and implement modes of assessment of a high quality.
 - alleviating increased study pressure. Unlike in a system with one summative final examination, students and lecturers will have to take an active attitude throughout the course unit or programme, since progress is monitored throughout the course unit and not just at the end.
- It is essential to promote good coordination among lecturers, as they are not always properly aware of what happens in previous, subsequent or simultaneously running course units. Better coordination will result in better continuity of the learning pathway and may prevent peak loads for students as a result of concurrent examinations.
- Continuous assessment concerns a combination of formative and summative modes of assessment. Too many summative tests will result in more stress and performance pressure among students, which is at the expense of success rates.

The above will affect faculty assessment policy and personnel policy, collaboration in teams, and role division in teaching. Many lecturers still have limited knowledge of formative assessment in particular. This is a crucial point for attention, as adding a (formative) test or splitting up a final exam will not necessarily have positive effects. It is important that the right test is administered at the right

moment. University and faculty policy and training can help to improve knowledge of continuous assessment, and in particular formative assessment.

Recommendations for focus area 2 - Continuous assessment

2.1 Facilitate good coordination among lecturers if the decision is made to give continuous assessment a bigger role within the degree programme. This will prevent peak loads for students as a result of clashes between tests for different course units.

2.2 Make resources available to lecturers who start working with continuous assessment. Lecturers who want to implement continuous assessment need time, for example to redesign course units and provide high-quality feedback.

2.3 Make more information available about formative assessment in the form of a central training module (also as part of the UTQ) and a centrally available didactic manual.

Focus area 3. Learning with and from each other

Group work can be very valuable in teaching processes: working together with others enables people to learn with and from each other and is a key component of academic development as well as professional practice. Group work can enable students to gain concrete experience with working in an international setting. Group work provides opportunities, as well as challenges, which are often expressed in tests: differences in work and study cultures, complexity of the assessment process, expectations and ambitions with regard to assessment, and determining each individual contribution to the group result. Group work is a complex issue, and both the 2019 evaluation and 2021 consultation showed that there is a great need for awareness building and advice about how to establish it. This focus area therefore pays extra attention to the coherence between learning outcomes, modes of instruction and modes of assessment.

Cooperative and collaborative learning

Cooperative learning, which means that students in a course unit work together on a variety of tasks under supervision of a lecturer to acquire fundamental knowledge, and collaboration in projects are suitable strategies to enable students to actively work with the subject matter and thus stimulate deep learning in the final phase of Bachelor's degree programmes and in Master's degree programmes. Both strategies also play a role in achieving Lifelong Learning through a gradual shift in the assessment practice: from *assessment of learning* via *assessment for learning* to *assessment as learning*. The learning outcomes are determined by the mode of assessment in both cooperative and collaborative learning. Cooperative learning, a *teacher-centered* strategy, enables lecturers to use a variety of assignments and/or tests plus one final test to determine whether students have sufficiently achieved the learning outcomes of the course unit. Collaborative learning is a *student-centered* strategy in which the lecturer has less control over the quality of collaboration and the exchange of knowledge among students. When assessing the final result of a collaborative project, it therefore seems logical to explicitly assess the collaboration in the group by including a combination of self-, peer- and co-assessment based on rubrics in the calculation of each student's mark.

Learning with and from each other emphasizes education as a social learning process.

Didactics/pedagogy, the academic tradition, and the professional field underline the importance of group processes in teaching:

- Using group work in teaching means incorporating factors that affect study success, such as
 - *involvement or engagement* (Tinto, 2012 and Laurillard, 2012)
 - *peer review system* (Laurillard, 2012)

- *Learning Communities* (Leigh Smith, 2004)
- Working in groups can be an effective way to learn complex skills in the form of a combination of technical and social skills (Newell and Bain, 2018, OECD 2017).
- Collaboration, including online collaboration, is an important characteristic of globalization (Shonfield and Gibson, 2019).
- Collaborative learning is an important method of learning on the interfaces of disciplines (interdisciplinary or transdisciplinary) (Newell and Bain, 2018).
- Learning from and with each other forms the basis for the academic institution, and the UG strategy also emphasizes the importance of academic communities, learning communities and inclusiveness. This is also reflected in polls and interviews with UG lecturers, students and Boards of Examiners.
- Professional practice gives high priority to the ability to collaborate effectively in teams in order to combine expertise to solve complex questions (see for example the engineering practice, Goldberg and Somerville, 2016).

The value of collaborative learning may lie in (OECD 2017): effective division of tasks, information from a variety of perspectives, experiences, and knowledge sources, and stimulating creativity and quality of solutions by group members. However, the many didactic challenges and functions of group work require a thorough design of the teaching process in order to effectively achieve this value (OECD 2017). This means that collaborative learning is one of the most complex modes of instruction (Laurillard, 2012) and that, as lecturers and students regularly experience, group work may be entirely *ineffective* in achieving learning outcomes, sometimes resulting in frustration among participants (Shonfield and Gibson, 2019, Newell and Bain, 2018). Although the importance of group work has been acknowledged for decades, effective group work is still in its infancy, particularly as a result of the high complexity of the teaching design (Newell and Bain, 2018), Shonfeld and Gibson, 2019) and the specific setting as problem-based or project-based teaching (OECD 2017, Newell and Bain, 2018). In addition, the complexity of learning outcomes and the teaching design requires proper collaboration on the part of lecturers, something that is not always a given in higher education. It should be noted that accommodation plays an important role in facilitating group work ([see, for example, UVN](#)). The theoretical framework of collaborative learning is summarized in (recent) literature according to the following table:

Table: definitions, aims, learning outcomes, and assessment of collaborative learning

<p><u>Collaborative learning</u> (definition as a quote from OECD 2017, p. 134) <i>The capacity of an individual to effectively engage in a process whereby two or more agents attempt to solve a problem by sharing the understanding and effort required to come to a solution and pooling their knowledge, skills and effort to reach that solution.</i></p>	
<p><u>Aims of collaborative learning</u> (Laurillard, 2012) -<i>Peer modeling</i>: each participant learns from how others work, what they say and how they deal with the topic -<i>Cognitive elaboration</i>: repeat, refine and discuss standpoints and insights -<i>Practise with one another</i>: motivation to generate ideas together</p>	<p><u>Categories of learning outcomes</u> (Shonfield and Gibson, 2019) -<i>Individually</i> increasing knowledge and skills, with own reflection, and visible to outsiders -<i>Collaborating</i> by continuously working as a group on a shared conception of the problem -<i>Solving problems</i>: the cognitive processes that are needed in order to achieve the goal when the problem cannot directly be solved via the usual methods</p>
<p><u>Assessment of group work</u> The PISA guidelines (OECD 2017), experiences, and reflections (Shonfield and Gibson, 2019) provide a framework for assessing group assignments and the individual components therein, possibly with the help of advanced software in the field of group processes, such as CATME (catme.org).</p>	

Practical consequences

A well-thought-out design of effective group work, with the aim of collaborative learning, can be an important component of the teaching strategy. Broadly speaking, as discussed above, collaborative learning does not seem to have been properly developed at the UG: group work often simply means dividing tasks within a group, with participants remaining in their comfort zone and relying on skills they already have. Peer modeling, cognitive elaboration and proper collaboration, as listed in the table above, are insufficiently developed, in particular if the assessment (or the main component of the assessment) is focused individually. The following is therefore recommended:

1. Clear starting points and aims of collaborative learning
2. Faculty guidelines and didactic support for teaching designs
3. Facilitating implementation in capacity and accommodation

1. Starting points and aims of effective group work

Effective group work introduces a complex didactic design to degree programmes. Implementing and improving group work thus involves a significant effort for degree programmes and lecturers. Supervising group work is often also a major task. The differences in level, group dynamics, subject-specific knowledge and skills, and the amount of personal supervision that group members need, require varying levels of coaching. It is therefore recommended to start by determining what is expected from effective group work, preferably at a University-wide level. The following should broadly speaking be determined:

- A. The amount of collaborative learning in group work; in other words, the complex teaching method in which team members acquire knowledge and skills by completing specific tasks, ultimately resulting in joint and shared knowledge;
- B. The function of group work in the acquisition of team skills: how the input and conduct of individual members results in an improved final product. Links could be made, for example, with professional practice. Collaborative learning could also incorporate these skills, but this is in principle a separate issue;
- C. A proposed final product of group work. After all, collaboration among group members will allow for more complex assignments. A recommendation could be made, for example, for this type of group work to make connections to the everyday practice of related fields. In addition, a multidisciplinary focus could be recommended here by requiring cross-disciplinary collaboration or incorporating complex issues, for example in the field of sustainability.

2. Faculty policy and didactic support

Subsequently, matters should be thoroughly examined at both the faculty and degree programme levels. A general guideline in response to a desire for 'more group work' is too vague for lecturers and curricula, and could therefore in fact be counter-productive and result in group work that is hardly effective, has no learning outcomes, and lacks didactic substantiation. One possible method could be for general guidelines to be translated to faculties and degree programmes, for example in accordance with the three aspects outlined under point 1, to formulate the aim of group work. Given that lecturers may not be very familiar with applying effective group work, this will also provide clarity on the didactic support that is needed.

Designing didactic modules may require extra time and attention, again as a result of the complexity of the didactic design (see for example Meijer et al., 2020). Before a faculty or degree programme starts to implement guidelines for group work, good consultation is required about which didactic support lecturers need in order to be able to maintain supervision capacity, not only at degree-programme level but also in terms of individual support of lecturers in practical implementation.

3. Facilitate implementation in accommodation and capacity

Group collaboration requires proper support, both in terms of creating collaboration possibilities and supervision capacity. The coronavirus pandemic has shown that students often find collaborating online very troublesome. Facilitating group work thus has the following dimensions:

- A. Group work requires a specific room type: typically a big room with tables that groups can sit around to have their discussions. More advanced rooms also enable groups to exchange information (plenary) and work together. In relation to this: which University and faculty guidelines are in place for meetings of individual groups as well as joint meetings of some or all groups?
- B. Which part of group work can be facilitated online? Experience has shown that, whereas brief work meetings with supervisors can certainly be held online, brainstorm sessions and joint meetings with multiple groups do not tend to run smoothly online. In addition, the (important) social component of group work is difficult to facilitate if meetings are mostly or exclusively held online;
- C. The possibilities for on-site group work have recently been very limited. In order to achieve effective group work, it is therefore necessary to closely examine the available accommodation, and new options may have to be sought. The TEO project ⁵ (which has continued as the ZEO project at the Zernike campus) is an example of this;
- D. Perhaps the most important issue concerns the availability of group supervision capacity. Coaching groups, both in terms of content and group dynamics, requires skilled and experienced lecturers/trainers and may be a bridge too far for student assistants, who have often only received limited training. In addition, experience has shown that rather a lot of lecturer capacity is needed in order to provide proper supervision to all groups.

In summary, for many degree programmes, effective group work builds bridges towards professional practice. Group work based on (complex) collaborative learning can also be an effective teaching method. In addition, smoothly running group work enables degree programmes to set more complex assignments, thus offering students more in-depth study and often a better understanding of the applications of theoretical concepts. However, the implementation of group work requires additional effort on the part of degree programmes and lecturers in terms of teaching design, supervision, and assessment. A three-step plan has been drawn up to indicate the choices to be made, starting with (University/faculty) starting points for group work. A more large-scale implementation will require additional lecturer capacity, additional didactic training and support of lecturers, and collaboration will have to be facilitated (accommodation and online facilities).

Interdisciplinarity, internationalization, and inclusion

Increasing interdisciplinarity will be achieved by involving multiple disciplines within a course unit or project. Given that assessment is performed by academic staff, the UG must have policy in place to do justice to the interdisciplinary character of the work that students submit for assessment. Educational products may be assigned to several academic assessors, who each arrive at their own independent assessment based on their own discipline, upon which a joint final assessment is determined and communicated to the students. This working method (which is already used for products such as final-year theses) requires clarity about how the final assessment is arrived at and how it is communicated and substantiated towards students. The UG offers a variety of options to students to learn to think analytically and creatively about academic or socially relevant issues in an interdisciplinary setting. However, assessment of interdisciplinary teaching fails if it only takes place from a monodisciplinary or multidisciplinary perspective.

Adaptations to assessment can play a role in the increasing diversity of participants in education. Both students and lecturers introduce different cultural backgrounds, ambitions, prior knowledge and *grade cultures* to the classroom. *Grade culture* in this context means that students may attach

⁵ TEO= *Tijdelijke Experimentele Onderwijsruimtes*; temporary experimental teaching rooms (At the old library on Boteringestraat in 2020; in 2021 also continued as ZEO (Z=Zernike) with new rooms at the Zernike campus.

different values to marks. For example, some students consider a mark of six as a pass mark, whereas others prefer to be graded against an average. Variation in modes of assessment may tie in with variations in learning styles and (cultural) study backgrounds, which may promote fair assessment of a diverse student population. A movement towards fewer written tests may be helpful here. However, simply replacing one dominant mode of assessment (for example a final multiple-choice exam) by another dominant mode of assessment (for example group work) will not solve the problem of increasing diversity, since this might disadvantage other groups of students (O'Neill & Maguire, 2019).

Recommendations for focus area 3 - Learning with and from each other

3.1 Establish a (University/faculty) framework with clear starting points and a description of the aims of cooperative/collaborative learning and what is expected of group work. In general terms:

- A. The amount of collaborative learning in group work; in other words, the complex teaching method in which team members acquire knowledge and skills by completing specific tasks, ultimately resulting in joint and shared knowledge;
- B. The function of group work in the acquisition of team skills;
- C. The role of peer review in the learning process;
- D. A proposed final product of group work, in which each student's own contribution is specified and can be individually assessed.

3.2 Translate the framework into faculty guidelines and didactic support for the teaching design and organisation of education, setup, assessment and implementation.

3.3 Facilitate support, capacity and accommodation based on faculty demand:

- A. redesign of rooms (typically: meeting space);
- B. online tools and facilities for components that can be organized online;
- C. expansion of room capacity for group work (follow-up of temporary experimental teaching rooms);
- D. appropriate group supervision capacity (training and support).

3.4 Stimulate variation and transparency in modes of assessment and pay attention to the backgrounds of students. Increase the visibility of training courses for lecturers and support in the field of internationalization and inclusion.

Focus area 4. Digital and online assessment

Context

In recent years, increasing use has been made of digital resources in assessment. A distinction must be made here between digital assessment and online assessment. Digital assessment takes place via computers on location (usually in the Aletta Jacobs examination hall), whereas online tests are not dependent on any location.

Definition/distinction

The use of digital modes of assessment has increased consistently and considerably in recent years. Digital assessment can be used to test at both lower and higher cognitive learning levels. This mode of assessment is similar in many respects to written tests on location. However, it also offers some unique advantages, such as the possibility to use audio or video, the use of different question types, an automated or more efficiently designed marking process, and greater ease of use for students (who are used to working digitally). The 2019 evaluation also recommended increasing the use of IT in assessment (by lecturers, peers and students themselves) and digital assessment. Although digital assessment is used a lot, lecturers are only aware to a limited extent of these unique possibilities.

Online assessment may involve any location-independent mode of assessment, for example take-home papers, e-portfolios and authentic modes of assessment. Online assessment can concern both formative and summative modes of assessment and use a variety of tools, such as asynchronous discussion fora and quiz tools. A combination of techniques will often yield the best results (Gikandi, Morrow & Davis, 2011). Although the use of online tests and modes of assessment in higher education was already increasing strongly in recent years (Larreamendy-Joerns & Leinhardt, 2006), an unexpectedly steep increase in the number of online tests could be seen during the coronavirus pandemic. It is important to note here that during the pandemic, the usual (paper or digital) summative tests were often translated directly to an online context. The tests that resulted from this are not necessarily examples of good online assessment. Many lecturers were introduced to online assessment as an emergency solution, and are often not aware of the advantages that it can offer.

As also became clear during the coronavirus pandemic, online assessment is not very suitable for summative assessment at lower knowledge levels. At higher cognitive levels, however, it has several advantages, such as the fact that it is location-independent and less dependent on timetabling. In addition, in certain authentic modes of assessment, the use of online technology improves students' learning abilities (Herrington, Oliver & Reeves, 2006). It also promotes the effectiveness of certain formative modes of assessment, for example because online settings can provide better possibilities to give more detailed and clearly written feedback that is integrated in the students' work (Wolsley, 2008).

Given the University's ambition to better utilize the advantages of digital/online/blended teaching in the future, it is advisable to continue to invest in this and to check for which course units online modes of assessment may dovetail better with the learning objectives than the modes that are currently in use. The knowledge of online assessment acquired during the coronavirus pandemic can be used here.

Recommendations for focus area 4 - Digital and online assessment

- 4.1 Make more information available about the advantages of digital and online assessment. Communicate the possibilities offered by the new electronic learning environment (LMS) more clearly towards lecturers. Many lecturers still have limited knowledge of the unique possibilities offered by digital and online assessment.
- 4.2 Support the use of digital and online modes of assessment and the further development of special assessment facilities (drawing, formulas, use of apps) based on education aims, to be fleshed out in the LMS. Expand central and faculty assessment facilities and support on the basis of demand.
- 4.3 Encourage degree programmes to define to what extent they wish to assess online and digitally, what this will look like within their curricula, and who is responsible for the necessary implementation. Involve central support in this.
- 4.4 Improve lecturers' knowledge of online assessment via training modules and *Communities of Practice*.

Focus area 5. Support and organization

The 2019 evaluation and the 2021 consultation showed that there was still some confusion about part of the Assessment Policy. In addition, work pressure related to assessment was often mentioned. The evaluation contained the recommendation to make the organization of assessment clearer, to disseminate policy better, and to invest in time and further professional development to promote assessment quality and quality assurance. In response to these recommendations, the revised Assessment Framework provides more information about [responsibilities \(see Appendix 1\)](#). In addition, proposals are made on the basis of this focus area for combining relevant information and promoting professionalization and collaboration.

In response to the evaluation, the Assessment committee has conducted several inventories to gain insight into the impact of the coronavirus lockdown measures in 2020/2021. The aim of these inventories was to identify possible lessons of the experienced situations where teaching and assessment were suddenly converted to an online environment. It was interesting to see the many different ways in which Boards of Examiners and teaching organizations fleshed out their role within the governmental frameworks during the crisis situation: from passive to proactive, with fluid boundaries between ‘front-end’ and ‘back-end’. This also emphasizes the importance of clarifying rules and collaboration between the relevant groups involved in teaching. To further strengthen the Boards of Examiners, it is important that the members feel supported and are given sufficient time to do their work properly.

The lockdown period also taught us that Boards of Examiners in the current organization often had to reinvent the wheel, and that they felt the need to discuss current topics that were as concrete as possible. A network was established in 2014 in the form of intervision (peer review) and professionalization meetings to promote knowledge exchange between and professional development of Boards of Examiners. This network could be strengthened further, with special attention being paid to the position of the (administrative secretary of the Board of Examiners, who usually plays a pivotal role and functions as the ‘memory’ of the Board of Examiners. Replacement and loss of knowledge is a genuine problem when a secretary stops. More collaboration and exchange could solve this problem. The formal independence of secretaries can also be strengthened. The secretary often hierarchically falls directly under the director or financial manager, which makes the independence of the Board of Examiners vulnerable. Finally, attention is paid to increasing support for the Boards of Examiners by setting up a pool of assessment experts and external members, who are currently often difficult to find.

Recommendations for focus area 5 - Support and organization

5.1 Combine relevant University-wide documents about assessment in a visible, public location (assessment policy, assessment framework, manuals, quality criteria at assessment level, link to support and edusupport.rug.nl). Make these documents available in English as well.

5.2 Make relevant documents at faculty and degree programme level (OER, Rules and Regulations, degree programme assessment plan, protocols) visible to both students and lecturers in public locations.

5.3 Draw up didactic manuals and update the assessment module (separate and in the UTQ) to promote permanent education of lecturers in the fields of:

- A. Formative assessment
- B. Digital and online assessment possibilities
- C. Group work

5.4 Structurally schedule new developments and best practices relating to assessments for lecturers by establishing a theme-based Community of Expertise.

5.5 Strengthen the professionalization and collaboration of Boards of Examiners:

- A. Invest in more time for members of Boards of Examiners.
- B. Organize standard beginners courses for new members of Boards of Examiners, alongside the existing professionalization day;
- C. Encourage each Board of Examiners to have at least one professor or UHD among its members;
- D. Set up a pool for exchanging/sharing external members. Collaboration could also be sought to this end with regional universities of applied sciences;
- E. Strengthen the role of administrative secretaries by:
 - a. offering standard central training
 - b. establishing a Community of Practice for more collaboration and knowledge exchange
 - c. keeping an eye on the independence of secretaries upon appointment.

5.6 Stimulate collaboration between the 'front-end' and 'back-end' at degree programme level when drawing up assessment policy and protocols. Although the formal frameworks and authorities must be followed, mutual coordination and advice in the teaching organization will result in a better system.

Appendix 1. 2021 Assessment Framework - Complete

Table of contents

1. [Test Requirements \(without explanatory notes\)](#)
2. [Questionnaire on quality criteria at test level \(tool\)](#)
3. [Definitions](#)
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 - 4.1. PDCA cycle / Procedures
 - 4.2. Overview of responsibilities
 - 4.3. Organization and quality assurance with regard to digital and online assessment

1. Test Requirements (without explanatory notes)

1.1. Subjects of assessment

Requirement 1. In order to ensure that the learning outcomes of the degree programme are attained, the Faculty Board must approve an assessment programme for each degree programme, aligning the learning outcomes of the degree programme, the learning outcomes of each course unit and assessment for each course unit. The assessment programme forms part of the OER of the degree programme and of the degree programme assessment plan.

Requirement 2. The Board of Examiners must assess whether the learning outcomes can be achieved via the assessment programme.

Requirement 3. The learning outcomes of the degree programme and of the individual course units must tie in with the level and orientation of the degree programme. The domain-specific framework of reference, the profile of the degree programme, and its international embedding, for example as described on the basis of the Dublin Descriptors, form the starting points.

Requirement 4. Choices made in relation to the summative and formative functions of assessment must be described in the degree programme assessment plan and any course unit assessment plans that are in place, with reference to promoting students' learning process.

Requirement 5. The Board of Examiners must assure the quality of the assessment programme, the degree programme assessment plan and any course unit assessment plans that are in place.

1.2. Scheduling of assessment

Requirement 6. Formative and/or summative tests must be scheduled in such a way that students are assessed frequently and in a variety of ways. Tests must be optimally distributed over the duration of course units, in such a way that clashes with other course units are kept to a minimum.

Requirement 7. Resits must be timetabled at moments that clash as little as possible with regular teaching and examinations. Resit timetabling must be such that students find it more attractive to make the required study effort for the regular exam.

Requirement 8. The degree programme must draw up regulations that set out how unsatisfactory final marks on course units can be compensated, so that students can, if possible, still complete the course unit within the relevant academic year. These regulations must define whether and, if so, how any compulsory mid-term summative tests can be compensated.

1.3. Modes of assessment and test conditions

Requirement 9. Each test must be as valid, reliable and transparent as possible. The choice of mode of assessment must be explained.

1.4. Examiners

Requirement 10. Each examiner must be declared fit by the Board of Examiners of the degree programme for their specific role in the examination programme.

Requirement 11. Examiners may consult third parties to facilitate assessment. Third parties have no assessment authority and can only give information. Students have the right to know, prior to the test, which information will be requested from third parties, and, after the assessment, which third parties have been consulted.

Requirement 12. The examiner has the exclusive authority to perform summative assessment in the context of group assignments. Group members are individually assessed, which means that their mark may be different from the marks of their fellow group members.

1.5. Regulations

Requirement 13. The pass mark system (absolute, relative, or a combination) must be justified and approved in advance, and students and the Board of Examiners must be informed afterwards of the pass mark that has been applied.

1.6. Quality assurance in assessment and assessment policy

Requirement 14. Each degree programme must have a degree programme assessment plan that reflects that assessment is seen as an instrument for influencing student behaviour and lists both the parties responsible for its implementation and the method of regular evaluation. The degree programme assessment plan, any course unit assessment plans, and the OER of the degree programme must be made available in public locations that are accessible to both students and lecturers. The Rules and Regulations of the Board of Examiners must be actively shared once a year with the examiners involved.

Requirement 15. For each degree programme there must be protocols for compiling, administering, assessing, and analysing tests.

Requirement 16. Examiners must consult their peers when constructing summative tests, and the Board of Examiners must monitor this process.

Requirement 17. Bachelor's and Master's theses must be assessed by at least two examiners. Each examiner must issue an independent assessment, upon which the assessments are combined into one joint result.

Requirement 18. A final project is assessed using one single assessment form, which contains a mark as well as explanatory notes to the assessment, and which also lists any third parties that have provided information to facilitate the assessment. Assessment forms must be archived.

Requirement 19. Each student will receive an individual assessment of their final project.

Requirement 20. An archiving system must be in place for all relevant assessment material in accordance with the *Selectielijst Universiteiten en Universitair Medische Centra*. The required documentation, the archiving method and the parties responsible for archiving must be defined in a protocol or in the degree programme assessment plan.

2. Questionnaire on quality criteria at test level (tool)

Degree programmes and Boards of Examiners can use the following questions as a tool to evaluate the quality of tests. The quality criteria were taken from the Manual for Boards of Examiners and relate to the quality criteria of reliability, validity, transparency, independence, and feasibility.

Validity

1. How is the test drawn up in relation to the learning outcomes?
2. Is it based on a test design (e.g. test matrix)?
3. Does the test sufficiently measure the required learning outcomes?
4. Does the test sufficiently reflect the material to be studied?
5. Does the test sufficiently reflect the material discussed in the lectures?
6. Has there been a double check in the creation of the test?

Reliability

7. Does the test include sufficient components to form a reliable impression of the student's competences?
8. Are the questions formulated clearly and unambiguously?
9. Are the assessment criteria formulated clearly and unambiguously?

Transparency

10. Is the mode of assessment clearly communicated at the start of the course unit?
11. Are the assessment criteria clearly communicated at the start of the course unit?
12. Is the way the final mark is arrived at clearly explained?
13. Are students clearly informed which minimum requirements they must satisfy in order to pass the test?
14. Is the performance expected from students in the test sufficiently practised during the course unit?

Feasibility

15. Is the test feasible for students in terms of the time available for studying and taking the test?
16. Is the test feasible for lecturers in terms of the number of lecturer hours available?

3. Definitions

This section contains definitions and descriptions of modes of assessment and documents.

3.1 Modes of assessment

Authentic assessment

A mode of assessment that examines how students will function in their future professional practice. Often used to test competences or skills. A practical situation is simulated, or the assessment takes place in an actual practical situation.

Formative assessment

Tests during the learning process, which primarily aim to provide students and lecturers with insight into the student's progress and to support the learning process. Examples include interim (peer) feedback and knowledge quizzes, as well as low-threshold modes such as asking discussion questions during a lecture to check where students are in the learning process and where the gaps in their knowledge and/or skills are. Informal formative tests do not count towards the formal summative assessment.

Continuous assessment

An approach that consists of combining formative and summative modes of assessment during a course unit or degree programme.

Summative partial exams

Partial exams are used during a learning process to evaluate to what extent certain subsets of learning outcomes have been achieved. An examination mark can be based on partial exams and/or a final exam.

Summative assessment

Tests that are used to conclude a learning process. The primary aim is to formally determine (by means of a pass/fail judgement, a mark, etc.) to what extent the intended learning outcomes have been achieved. Examples include examinations and partial exams, as well as final assignments, such as papers, theses, and final presentations. The assessment must always be valid, reliable, transparent, and sufficiently independent.

3.2 Documents

UG Assessment Framework

The UG-wide Assessment Framework (this document) sets out minimum requirements for assessment at the UG. The Assessment Framework also sets out responsibilities within the UG.

Model Rules and Regulations for Boards of Examiners

The [Model Rules and Regulations for Boards of Examiners](#) are approved by the Board of the University. They form the model for the regulations that are annually approved by the Boards of Examiners and relate to the assessment of examinations and final assessment and the determination of their results. The Rules and Regulations (R&R) are approved for a degree programme or a cluster of degree programmes. Approving the R&R is a legal power of the Board of Examiners.

Manual for Boards of Examiners

The [Manual for Boards of Examiners](#) aims to inform the curriculum management (i.e. Faculty Boards, Directors of Education, Programme Directors) and Boards of Examiners of the legal frameworks within which the Boards of Examiners must operate, and discuss how the relevant processes can be

implemented. The Manual is based on articles in the Higher Education and Research Act (WHW) and the decisions that the Board of the University takes on the grounds of these articles. The Manual is updated in response to amendments to the WHW and when the implementation practice gives cause to do so. The appendices to the Manual contain information such as the profile of an assessment expert, relevant WHW articles, explanatory notes to assessment quality, an annual report template, and an example of a decision regarding a rejected request.

Model OER

The [Model Teaching and Examination Regulations \(OER\)](#) are approved by the Board of the University, and is subsequently adjusted by each individual faculty/degree programme. The Faculty Board is mandated by the Board of the University of Groningen to approve the OER. The OER set out the specific rights and obligations that apply to each degree programme, for both the students and the degree programme. The OER contain adequate and clear information about the degree programme or cluster of degree programmes in question, and the students of the programme(s) can invoke this information. In accordance with the WHW (Article 7.13.2 a-y), the following topics and procedural matters with regard to assessment must be set out in the OER:

- the content of the degree programme and its examinations;
- the number and order of tests;
- the mode of assessment;
- the way in which exemptions can be obtained;
- the sequence and entry requirements of course units;
- publication of marks and right of inspection;
- resits;
- the validity period of exam results;
- provisions for students with functional impairments.

Assessment programme (is part of/forms an Appendix to the OER and the degree programme assessment plan)

To ensure that a degree programme's learning outcomes are attained, the degree programme must compile a coherent assessment programme that dovetails with a coherent curriculum. The assessment programme contains the entire set of tests that are used to determine to what extent students have achieved the learning outcomes specified by the degree programme. The assessment programme assures the fit between the learning outcomes of the degree programme, the learning outcomes of the various course units and the assessment of these learning outcomes. The components of the assessment programme are based on WHW Article 7.13. The assessment programme must be included as part of or an appendix to the OER of each degree programme. In addition, the assessment programme must also be included in the degree programme assessment plan in order to provide information to lecturers and students and ensure coherence between the degree programme assessment plan and the assessment programme. The assessment programme contains:

- The learning outcomes of the degree programme;
- The course units and the learning outcomes of each course unit;
- The relationship between course units and learning outcomes: how are the learning outcomes attained (a matrix is a tool to show this);
- The mode of assessment and test moments for each course unit.

Degree programme assessment plan

The UG assessment policy and the Test Requirements are based on the WHW, accreditation standards, and the UG educational philosophy. The degree programme assessment plan sets out how individual degree programmes flesh out the components below, which follow from the UG Test Requirements and the quality assurance cycle:

- the test design procedures, assessment procedures, and assessment criteria used;
- a list of who is responsible for the implementation of the various components of the assessment policy;

- the manner of regular evaluation;
- a description of the choices made with regard to the summative and formative functions of assessment, with reference to promoting students' learning process and the scheduling/distribution of tests.

The assessment programme also forms part of the degree programme assessment plan (and is also included in the OER). The assessment protocols used can be included in the degree programme assessment plan.

Assessment protocols

A degree programme's assessment protocols relate to compiling, administering, assessing, and analysing tests within that degree programme. The required documentation, the method of archiving, and the persons responsible for archiving must also be defined. The assessment protocols can be included in the degree programme assessment plan.

Course unit assessment plan

To promote consistency between assessment at the degree programme and course unit levels, it is advisable to use coherent course unit assessment plans alongside the degree programme assessment plan. The course unit assessment plans must tie in with the degree programme assessment plan. A course unit assessment plan should set out (unless described elsewhere):

- a description of the choices made with regard to the summative and formative functions of the tests in the course unit, with reference to promoting students' learning process and the scheduling/distribution of tests;
- the relationship between modes of assessment and learning outcomes of the course unit (knowledge, understanding, and skills);
- the information that is provided in response to the assessment (feedback, answer model, inspection);
- the pass mark system used, substantiated;
- whether and, if so, how compulsory mid-term summative assignments or exams can be compensated.

Course unit

Unit of study. This can be a component within a degree programme, but can also include other *credit bearing* components.

4. Responsibilities

Section 4.1 provides a summary of the PDCA cycle and procedures, which should result in a comprehensive system of quality assurance with regard to assessment. The table in section 4.2 provides an overview of the division of responsibilities within the UG. The organization and quality assurance related to digital and online assessment are described separately in section 4.3. This chapter focuses on the main points – more specific descriptions can be found in the model OERs, model R&Rs and the Manual for Boards of Examiners, as they are subject to annual modifications.

4.1 PDCA cycle / Procedures

Assessment forms part of the [UG Educational Quality Assurance](#), and the PDCA cycle is set out in the UG quality assurance policy. The UG PDCA cycle for assessment aims to achieve systematic improvement by monitoring and reflecting on the quality of teaching at the University, faculty and degree programme levels. The following PDCA cycle is applied:

- P: Policy and other plans are adopted in the Plan phase;
- D: The plans are implemented, and the implementation is measured, in the Do phase;
- C: The measurements are compared to the plans in the Check phase;
- A: During the Act phase, new plans are made on the basis of the analysis. A new cycle now starts.

Plans, signals and findings are recorded, monitored, and fed back so that they can result in adjustments. The cycle for assessment is accompanied by the following procedures:

- The Board of the University draws up a UG strategic plan, containing an educational philosophy. The Board of the University approves the UG Assessment Framework and annually distributes a Manual for Boards of Examiners and model documents for the OER and R&R;
- The Faculty Boards draw up faculty strategic plans and, based on these, policy plans for teaching quality. Assessments and Boards of Examiners are topics in each faculty's policy plans for teaching quality;
- Model documents are adjusted by faculties/degree programmes (within the UG Assessment Framework) to fit the context of each faculty, cluster of degree programmes, or individual degree programme;
- Each degree programme has its own OER, with an assessment programme as an appendix. Each degree programme also has its own degree programme assessment plan, also containing the assessment programme as an appendix. The assessment in each course unit, possibly described in the course unit assessment plan, must satisfy the degree programme assessment plan.

4.2 Overview of responsibilities

The table below provides an overview of parties responsible, activities/responsibilities, and relevant documents, possibly with legal authority (WHW).

<i>Responsible parties</i>	<i>Responsible for the following assessment-related matters:</i>	<i>Relevant documents</i>
University	<ul style="list-style-type: none"> ensuring optimum regulations aimed at high-quality graduation and study progress, sound organization and logistics of assessment infrastructure for the implementation of assessment (WHW) practical organization of examinations and final assessments academic year plans and exam times for central examination locations professionalization activities with regard to assessment <ul style="list-style-type: none"> assessment modules for lecturers, both separately and as part of the UG UTQ web platform https://edusupport.rug.nl/, containing information, for example, about (alternative) modes of assessment and instructions for digital and online assessment Boards of Examiners: professionalization day, Community of Practice, and intervision meetings 	<ul style="list-style-type: none"> University-wide Assessment Framework, Assessment Policy Annual Manual for Boards of Examiners Annual model OER Annual model R&R
Faculty Board	<ul style="list-style-type: none"> ensuring optimum regulations aimed at high-quality graduation and study progress, sound organization and logistics of assessment infrastructure for the implementation of assessment approving OER and degree programme assessment plan supporting lecturers in designing tests (protocols, support, and funding of training) promoting a teaching and assessment culture where it is considered normal for students to follow the regular teaching programme and to pass exams in one go establishing a Board of Examiners (appointing members) for each degree programme or cluster of degree programmes 	<ul style="list-style-type: none"> (WHW) The Board of the University (within the UG mandated to the Faculty Board) approves the OER for each degree programme or cluster of degree programmes offered by the University. faculty assessment policy plan profile for members of Boards of Examiners, described in the Manual for Boards of Examiners
Director of Education for degree programmes / Programme Director	<ul style="list-style-type: none"> drawing up the degree programme assessment plan 	<ul style="list-style-type: none"> degree programme assessment plan
Board of Examiners • Assessment Committee	<ul style="list-style-type: none"> checking the quality and implementation of the assessment programme, the degree programme assessment plan, and any course unit assessment plans given the duties of the Board of Examiners, the Board should preferably also issue advice (in advance) on the degree programme's assessment policy checking assessment material and accompanying forms (e.g. signature of second assessor, answer models, etc.) and checking whether the learning outcomes of a course unit are indeed assessed. The Board of Examiners does this on an annual basis and checks a reasonable number of tests every year (WHW) appointing examiners, in accordance with the criteria set out in the OER 	<ul style="list-style-type: none"> Manual for Boards of Examiners Annual Report of the Board of Examiners (template in Manual for Boards of Examiners) to be presented to the Faculty Board (WHW) The Rules and Regulations set out how the Board of Examiners handles matters in the field of examinations and final assessments. In accordance with the Act, the Board of Examiners is responsible for the content of the R&R.

	<ul style="list-style-type: none"> • the degree programme board and the Board of Examiners remain responsible for ensuring and assuring quality respectively • the Board of Examiners may delegate part of its quality assurance duties to an Assessment Committee. The Board of examiners will, however, remain responsible. Members of an Assessment Committee must satisfy the same requirements as (internal or external) members of a Board of Examiners 	
Examiner	<ul style="list-style-type: none"> • appointed by the Board of Examiners • ensuring that assessment satisfies the requirements set out in the degree programme assessment plan (incl. assessment quality criteria), and instructing lecturers and invigilators • (WHW) setting examinations and determining their results • (WHW) providing requested information to the Board of Examiners 	<ul style="list-style-type: none"> • course unit assessment plan, if present, ties in with degree programme assessment plan
Lecturer (preferably in teams)	<ul style="list-style-type: none"> • assessing the learning outcomes of a course unit. This means that they are responsible for thoroughly preparing students for the test and for enabling suitable students to pass the course unit within the time frame reserved for it. Lecturers must be committed to and spend the necessary time on supervising their students regarding the test in terms of content and form as well as assessment 	
Student	<ul style="list-style-type: none"> • maintaining a committed, active study attitude, participating in the teaching activities and preparing thoroughly and in good time for tests 	

4.3 Organization and quality assurance with regard to digital and online assessment

The UG central facilities for digital assessment have been strongly expanded and processes and support have been established in recent years. This was mainly realized via the DITO2020 project. A distinction must be made here between digital assessment and online assessment. Digital assessment takes place on designated computers on location (usually in the Aletta Jacobs examination hall), whereas online tests are not dependent on any location. The DITO2020 project aimed to enable over 80% of all UG assessments to be conducted digitally in a safe way. In 2020, 1200 digital assessment stations were available in the central examination hall of the UG. This UG Assessment Framework formally sets out the basic organization of digital assessment.

Support and role division

Both the degree programme and central support play a role in digital assessment. Central support for digital assessment is arranged by the CIT department of Educational Support and Innovation (ESI). After DITO2020, it was structurally assigned as *Dienst Digitaal Toetsen* [digital assessment service]. Support is provided in close consultation with the faculties and in accordance with the needs of lecturers. The following support is available at the University level:

- Support for lecturers when developing tests, both in terms of didactic and technical design. Evaluation of a test may result in adjustments to the teaching design, the test, the learning outcomes or the testing process;
- Technical support of digital assessment during examinations in central assessment facilities;
- Archiving digital tests (questions, model answers, and the answers given by students);
- Demand-driven development of new digital assessment facilities.

The faculty/degree programme/examiner remain responsible for the practical organization of digital assessment; this is not the responsibility of central support. The degree programme board and the Board of Examiners are responsible for ensuring and assuring quality. The Boards of Examiners are responsible for checking the quality of assessment and monitoring the implementation of the degree programme assessment plan and any course unit assessment plans. According to the WHW, the examiner is responsible for administering the test. The Board of Examiners will appoint examiners to set examinations and determine the results. The examiners must provide the Board of Examiners with information as requested.

Security and quality assurance

Digital assessment at the UG is designed in such a way that every test is taken in a secure environment in which the assessment quality can be assured. The UG applies the following principles with regard to security and quality assurance for digital and online assessment with a summative function:

1. Digital assessment takes place on campus

Digital tests are administered on campus, in the secure and controlled digital assessment environment.

2. Tests that require invigilation can only take place online in exceptional cases

During the coronavirus lockdown in January 2021, a [framework for online assessment](#) was approved with a view to quality assurance, didactic considerations, student well-being, and anti-cheating measures. This concerns summative tests that require invigilation due to a high risk of cheating. The principles from this framework will be maintained:

- If assessment cannot take place on campus, exams will be translated or converted into (alternative) online exams that can be taken remotely.
- Special measures are possible to deviate from on-campus assessment in cases when converting to an alternative mode of assessment is insufficiently feasible or when the risks of cheating are or remain high. The following principles then apply:
 - On-campus assessment may be deviated from for very specific target groups or in emergencies (when students are unable to attend an on-campus exam in person or when emergency measures apply, such as during the coronavirus pandemic), but only within the frameworks and invigilation protocols approved by the University.
 - The faculty/degree programme is responsible for appointing invigilators and for adjusting and approving examination guidelines.
 - Organization of an examination with online invigilation must be substantiated and coordinated with the Board of Examiners. Alternative modes of assessment and didactic solutions must be thoroughly examined.
 - The Faculty Board decides whether online invigilation can be used.
 - If invigilation is required for an exam but the examination cannot be held on campus, the mode of invigilation will consist of digital simulation of the on-campus situation. This concerns live online invigilation for exams with high risks and to support students (possibility to ask questions). In accordance with the GDPR and with a view to the privacy and well-being of students as well as the limited effectiveness, no online proctoring or online proctoring technologies (AI and storing images) are used.

3. Only university-wide approved software

In order to be able to assure archiving, quality, security, and technical support, only software that is managed and made available by the CIT and has been approved for administering summative tests can be used.

Appendix 2. Sources

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2. Accreditation frameworks

2.1 ESG standard+guidelines Student-centred learning, teaching and assessment (2015)

ESG Standards and Guidelines for Quality Assurance in the European Higher Education Area, Chapter II.Part 1.1.3 *Student-centred learning, teaching and assessment*

Standard:

Institutions should ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.

Guidelines:

Student-centred learning and teaching plays an important role in stimulating students' motivation, self-reflection and engagement in the learning process. This means careful consideration of the design and delivery of study programmes and the assessment of outcomes.

The implementation of student-centred learning and teaching

- respects and attends to the diversity of students and their needs, enabling flexible learning paths;
- considers and uses different modes of delivery, where appropriate;
- flexibly uses a variety of pedagogical methods;
- regularly evaluates and adjusts the modes of delivery and pedagogical methods;
- encourages a sense of autonomy in the learner, while ensuring adequate guidance and support from the teacher;
- promotes mutual respect within the learner-teacher relationship;
- has appropriate procedures for dealing with students' complaints.

Considering the importance of assessment for the students' progression and their future careers, quality assurance processes for assessment take into account the following:

- Assessors are familiar with existing testing and examination methods and receive support in developing their own skills in this field;
- The criteria for and method of assessment as well as criteria for marking are published in advance;
- The assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary, is linked to advice on the learning process;
- Where possible, assessment is carried out by more than one examiner;
- The regulations for assessment take into account mitigating circumstances;
- Assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures;

A formal procedure for student appeals is in place.

2.2 NVAO Institutional Quality Assurance Assessment standards (2018)

Vision and policy Standard 1: The institution has a broadly supported educational philosophy and pursues a corresponding policy focused on the internal quality assurance of its education.

The institution has a clear vision of good teaching, which is supported throughout the institution. Lecturers and students support the vision and develop it in mutual consultation and with external stakeholders. The educational philosophy remains up-to-date thanks to regular coordination with the relevant (changing) environment. The educational philosophy is translated into explicit starting points for quality assurance. In accordance with the ESG, the educational philosophy focuses on students (student-centred learning).

Implementation Standard 2: The institution realizes its educational philosophy in an effective manner, as demonstrated by appropriate policy actions and processes, particularly relating to staff, assessment, facilities, and students with functional impairments.

The educational philosophy has been adequately translated into concrete policy actions and processes. The institution has processes in place for the design, recognition and assurance of the quality of degree programmes in accordance with the ESG, and demonstrates the functioning and application of these processes on the basis of a track record. Students and staff are co-owners of the policy and contribute to its realization on the basis of the joint philosophy. This involvement reflects the realization of the intended quality culture of the institution. The implementation is in line with the philosophy: staff, assessment, and facilities promote the accessibility and feasibility of the teaching.

Evaluation and monitoring Standard 3: The institution systematically evaluates whether the intended policy objectives relating to teaching quality are achieved. Relevant stakeholders are involved in this process.

The institution organizes effective feedback that supports the realization of the policy. To this end, it uses suitable evaluation and measuring activities, which are securely anchored in the institution. These instruments provide clear information that can be used to formulate the desired quality development. One component is a transparent working method to identify and report risks and, where necessary, take measures to improve matters. Reflection on results is part of the organizational model and provides sufficient insight into the effectiveness of policy implementation at all levels of the organization and consultative participation bodies. The measuring and evaluation activities do not need to be uniform throughout the institution – it is the effectiveness that matters. Students, staff members, alumni, and experts from the societal field play an active role in evaluations. The institution publishes accurate, up-to-date, and accessible information about the evaluation results.

Development Standard 4: The institution has a focus on development and works systematically on the improvement of its education.

Based on feedback and reflection on the results, targeted measures have been taken to strengthen, improve, or adjust the policy or the implementation. Following up on measures for improvement is anchored in the organizational structure. The institution's development policy stimulates all those involved to contribute to innovation and quality improvement. Internal and external stakeholders have been informed about the developments that will be initiated on the basis of the evaluation results. The institution continuously improves and ties in with the (changing) circumstances and expectations of students and employers.

2.3 NVAO Degree Programme Accreditation standards (expanded framework 2018)

Intended learning outcomes

Standard 1: The intended learning outcomes tie in with the level and orientation of the degree programme and are geared to the expectations of the professional field as well as international requirements.

The intended learning outcomes demonstrably describe the level (associate degree, Bachelor's, or Master's) as set out in the *Nederlands kwalificatieraamwerk* [Dutch qualifications framework] and orientation (university of applied sciences or university) of the degree programme. In addition, they dovetail with the requirements that the regional, national, and international professional fields currently demand from the content of the degree programme. Where relevant, the intended learning outcomes also tie in with relevant legislation and regulations. The starting points for the design of the degree programme dovetail with the educational philosophy and the profile of the institution. The intended learning outcomes are regularly evaluated.

Programme; orientation

Standard 2: The programme enables the acquisition of suitable (professional or academic) research and professional skills.

The programme ties in with current national and international developments, demands, and expectations in the professional field. Academic skills and/or research competences and/or professional competences are covered in a way that ties in with the orientation and the level of the degree programme.

Programme; content

Standard 3: The content of the programme enables students to achieve the intended learning outcomes.

The overarching learning outcomes are adequately translated into specific learning outcomes at degree programme and course unit level.

Programme; learning environment

Standard 4: The design of the programme encourages students to study and enables them to achieve the intended learning outcomes.

The design of the programme contributes to the realization of the intended learning outcomes. The learning environment encourages students to take an active role in designing their own learning process (student-centred). The design of the learning environment ties in with the educational philosophy of the institution. If teaching is provided in a language other than Dutch, the degree programme will substantiate this choice. This is also the case if the degree programme uses a name in an alternative language.

Admissions

Standard 5: The programme dovetails with the qualifications of incoming students.

The admission requirements are realistic in relation to the intended learning outcomes.

Staff

Standard 6: The lecturer team is qualified to ensure that the content-specific and didactic aims of the degree programme are achieved, and the team has sufficient members.

The lecturers are sufficiently qualified, both in terms of content and didactics skills, to teach the degree programme. Lecturers have sufficient proficiency in the language in which they teach. The personnel policy contributes to this. There is sufficient staff available to offer the degree programme and supervise the students.

Provisions

Standard 7: Accommodation and material facilities are satisfactory for the realization of the programme.

The degree programme's accommodation and facilities tie in with the intended learning outcomes and the learning environment.

Guidance

Standard 8: Tutoring and information provision to students promote study progress and tie in with the students' needs.

Students receive suitable guidance (also in the event of functional impairments). The degree programme's information provision is adequate.

Quality assurance

Standard 9: The degree programme has explicit and broadly supported quality assurance, promotes the quality culture and focuses on development.

The degree programme organizes effective regular feedback, which supports the intended learning outcomes. Existing degree programmes make the necessary improvements in response to the results of the previous assessment, using suitable evaluation and measuring activities. The results of this evaluation demonstrably form the basis for development and improvement. The degree programme internally accounts for its contribution to the realization of the institution's strategic aims. Quality assurance guarantees that the intended learning outcomes are realized. The Programme Committees, Boards of Examiners, staff, students, alumni, and the professional field related to the degree programme are actively involved in internal quality assurance. The design processes and the recognition and assurance of the quality of the degree programme are in accordance with the ESG. The degree programme publishes accurate, reliable information about the quality of the degree programme, which is easily accessible to the target groups.

Assessment

Standard 10: The degree programme has an adequate assessment system.

The assessment is valid, reliable, and sufficiently independent. The quality of examinations and final assessments is sufficiently assured and satisfies legal quality requirements. The Board of Examiners exercises its legal powers. The tests support students' own learning process.

Learning outcomes achieved

Standard 11: The degree programme shows that the intended learning outcomes are being achieved.

The fact that the intended learning outcomes are being achieved is reflected in the results of tests, final projects, and the performance of graduates in professional practice or follow-on degree programmes.