# **LEARNING OUTCOMES IN EXTERNAL QUALITY ASSURANCE APPROACHES**

Investigating and discussing Nordic practices and developments

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# **SUMMARY**

In recent years, there has been a strong policy focus on learning outcomes at the European level which to a great extent is due to the role of learning outcomes in the Bologna educational reforms as well as the two overarching European qualification frameworks. Therefore, the Nordic Quality Assurance Network in Higher Education (NOQA) decided that it would be interesting to explore more in detail how learning outcomes are applied in external quality assurance in the Nordic countries.

Quality assurance agencies from Denmark, Finland, Norway and Sweden participated in the joint NOQA project 2012-2013. The project explored how learning outcomes are applied in the external quality assurance approaches of higher education, with a special emphasis on the collection, assessment and use of data. As an outcome of the project, data about the agencies' approaches to learning outcomes was collected and analysed.

The Nordic countries are at different stages in the implementation of the national qualifications frameworks and learning outcomes. Overall, the report shows that learning outcomes have been implemented in various different ways in the Nordic countries, in accordance with the policy and educational tradition in the countries. Currently, learning outcomes play a central role in the external quality assurance approaches in Sweden, Denmark and Norway (accreditations), while in Finland learning outcomes are not a central element of the approach. In the Norwegian quality audits, it is expected that learning outcomes will play a prominent role when it is implemented in the higher education institutions' internal quality assurance systems. As regards learning outcomes, the approaches are mainly focusing on intended learning outcomes and the description of how learning outcomes are implemented and assessed in study programmes. However, achieved learning outcomes are also assessed in Sweden and Denmark; in Sweden being the main focus of assessment.

Based on the findings of this project, it can be concluded that learning outcomes are a useful tool for assessing the quality of a study programmes. Learning outcomes make it possible to assess the level and cohesion of the programme and the relevance for the labour market in a more systematic way. For example in Denmark and Norway, where learning outcomes take a prominent position in the accreditation criteria, learning outcomes are often used to interlink different elements regarding the quality and relevance of a programme and thus making it possible for the expert panels to make a holistic assessment of the programme focusing not only on the structure but on the actual delivery of the programme. Furthermore, learning outcomes can also enhance transparency and credibility of study programmes.

On the other hand, learning outcomes also give some methodological challenges for the agencies when it comes to assessing learning outcomes. For example, the analysis showed that if the generic learning outcomes descriptors of the NQF are copied as learning outcomes for a study programme then the focus of the assessment is moved from the learning outcomes of the programme to a consideration of how the courses are related to the national descriptors. The analysis also highlighted the importance of making a holistic assessment of the intended learning outcomes to avoid making the assessment a formalistic exercise.

The purposefulness and usability of the data collected is another issue that has been discussed in this project. It appears that at least in some cases not all of the data collected has been used in the assessment; materials that the HEIs have produced for the assessment have not always been considered relevant or necessary for the assessment by the external experts.

As indicated in this report, the assessment of achieved learning outcomes is methodologically challenging and raises questions about whether it is possible to the measure quality of education by measuring 'output' which is not related to the 'input'. In the Swedish approach, great weight has been given to students' independent projects in the overall assessment and based on their experience there are some limitations with regard to the validity of using them as assessment material alone as a measure of quality of education.

It also appears that in audit approaches with a very wide focus on nearly all activities of the HEI, such as the Finnish approach, it is harder to implement learning outcomes as a central element of the assessment. In Norway the focus of the audit is on the institution's own practice and capacity when it comes to evaluate and develop their own educational provision. It is likely that an audit approach with the main focus on the quality management of educational activities and not all activities of the HEI is better able to incorporate the different aspects of learning outcomes in the evaluation.

# 1 INTRODUCTION

# 1.1 Background

Nordic Quality Assurance Network in Higher Education (NOQA) was established in 2003 by the five Nordic countries and their respective national organisations engaged in evaluation and external quality assurance of higher education. NOQA acts as a forum for information dissemination and exchange of experiences. NOQA is also engaged in projects on topics which are of common interest for the Nordic quality assurance agencies. This 11<sup>th</sup> joint NOQA project is a follow-up on the NOQA 2007-2008 project<sup>1</sup>, which focused on describing and analysing the use of learning outcomes in Nordic higher education institutions and quality assurance agencies. In the light of the strong policy focus on learning outcomes at the European level and learning outcomes being a central element of the national qualifications frameworks (NQF), the NOQA member organisations decided that it would be essential to further explore the role of learning outcomes in external quality assurance.

For the present discussion, it will be useful to briefly define and discuss quality assurance, qualifications frameworks and learning outcomes.

# **Quality assurance**

Besides the main objective of curricular reform, quality assurance (QA) has been considered the aspect of the Bologna process that has gained the greatest momentum (Reichert, 2010). One of the milestones was the adoption of the *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (also known as ESG) by the European ministers in charge of higher education in Bergen in 2005. As in the ESG, quality assurance in higher education is commonly divided into internal and external quality assurance (EQA). Internal refers to quality assurance activities within higher education institutions and external to quality assurance activities conducted by quality assurance organisations or bodies external to the institution.

Even if common standards, guidelines and procedures have been agreed for the external quality assurance in the European Higher Education Area (EHEA), there is a great diversity in the external quality assurance approaches within Europe. Also, the philosophy and purpose of the EQA activities vary (see e.g. ENQA, 2009; ECAEA, 2010). According to the ESG, the different types of EQA are: institutional evaluations; subject and programme evaluations; accreditation (at subject, programme and institutional level) and a combination of these. This mix of different types of EQA is also characteristic of the Nordic countries, in which external quality assurance has taken different forms depending on the unique country contexts.

# **Qualifications frameworks**

There are two overarching qualifications frameworks operating at the European level: the Framework for Qualifications of the European Higher Education Area (also known as EHEA framework, QF-EHEA or Bologna Framework) and the European Qualifications Framework for Lifelong Learning (EQF). The EHEA framework has emerged as part of the Bologna process (adopted in Bergen in 2005) and EQF has been developed by the European Commission (adopted in 2008). The EHEA framework is only relating to formal recognised higher education and is based on three cycle descriptors known as 'Dublin descriptors', which indicate the learning outcomes for first, second and third cycle degrees (EHEA, 2012a). The EQF applies to all types of

<sup>&</sup>lt;sup>1</sup>Gallavara et al. (2008) Learning outcomes: Common framework – different approaches to evaluating learning outcomes in the Nordic countries. *ENQA Occasional papers*, 15.

education, training and qualifications, from school education to academic, professional and vocational and consists of eight levels (European Commission, 2012). It has been noted, that although the descriptors and wording in the two frameworks are different, there are no major differences between the two frameworks and they are compatible (see e.g. London Communiqué, 2007). Both frameworks describe qualifications in terms of learning outcomes and emphasise a shift from learning 'inputs' to learning 'outputs' and student-centred learning.

All Nordic countries participate in the Bologna process and are also members of the European Union or the European Economic Area. Therefore, both of the overarching European frameworks are valid for all Nordic countries. However, depending on the policy of the country, the NQFs have been based on one or both of the European overarching frameworks. The aim of NQFs is the development of comparable and understandable degrees and systems. The NQFs describe the expected learning outcomes for a given qualification, the differences between the qualifications and how learners can move between qualifications within an education system (EHEA, 2012b). The implementation of national qualifications frameworks is at very different stages in the Nordic countries and in the EHEA in general. The aim was to have the NQFs implemented in the EHEA by 2012; however, there are still EHEA-countries that do not yet have a NQF in place.

#### **Learning outcomes**

Not only are the two overarching European frameworks and the national qualifications frameworks based on learning outcomes, but learning outcomes are also considered more widely as a fundamental building block of the whole Bologna educational reform. It has been argued that the strong emphasis on learning outcomes in the Bologna process is due to the fact that learning outcomes represent both a practical device and a methodological approach to improve the competitiveness, transparency, recognition and mobility of European education. Learning outcomes and 'outcomes-based approaches' are thought to have a strong impact on curriculum design, teaching, learning and assessment, as well as quality assurance. Hence, learning outcomes represent a more fundamental shift from a traditional teaching approach to a student-centred approach where the focus is on learning. This reflects the quality of higher education, which is strongly emphasised in the Bologna process (Adam, 2006).

There is no agreed definition of learning outcomes, however, as maintained by Adam (2006) learning outcomes are often defined as "statements of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning. They are explicit statements about the outcomes of learning – the results of learning." (2006 p.2). Similar definitions of learning outcomes are used in the EQF and QF-EHEA.

The learning outcomes approach has been criticised for constraining and prescribing the learning process. Some commentators have argued that higher education learning cannot be restricted and reduced to a series of learning outcomes (Adam, 2006). Others have pointed out that the approach does not support the development of explorative and experimental education. It can be argued that learning outcomes alone cannot fully capture the qualities of the learner and of the learning process. Neither do learning outcomes replace considerations on what are the most accurate inputs to the learning process. It has been suggested that a clear distinction between outcome and input approach is not necessary – the approaches complement each other and enhance what currently exists in education (EU, 2011). The challenges experienced by the Nordic agencies will be discussed in the following chapters.

Supposedly, the role of learning outcomes in external quality assurance will increase when a national qualifications framework has been implemented and when learning outcomes are used at institutional level to define degrees and study programmes and more widely in teaching, learning and assessment. As will be discussed in the subsequent chapters of this report, learning outcomes is a key element of the external quality assurance in the Nordic countries, with the exception of Finland.

The aim of the project and the members of the project team are presented below. In the following chapter, we will give a brief overview of the external quality assurance approaches as well as the national qualifications frameworks in the Nordic countries. In Chapter 3, we will explore country by country how learning outcomes are applied in the external quality assurance processes. The analysis and discussion focuses on the assessment of learning outcomes and results of using them in external quality assurance processes, as well as the strengths and limitations in the way they are applied. Finally, in the concluding Chapter 4, we will summarise the current status of learning outcomes in the Nordic approaches and look at the strengths and limitations.

# 1.2 Aim of the project

The main purpose of this project is to collect and analyse comparable data about the Nordic external quality assurance agencies' approaches to learning outcomes and through this work support developments in the agencies' methods, criteria and/or documentation. Specifically the project aims to:

- 1. To explore how learning outcomes are applied/used in external quality assurance approaches of higher education in the Nordic countries, with a special emphasis on the collection, assessment and use of data.
- 2. To identify strengths and limitations when looking at how learning outcomes are applied in external quality assurance in the Nordic countries.

It should be noted that Iceland participated in this project only as an observer and therefore in this report "Nordic countries" refers only to Denmark, Finland, Norway and Sweden.

# 1.3 The project team

A project team consisting of representatives from each NOQA member agency was responsible for the project. The representatives from EVA and ACE acted as project coordinators.

# The project team included following members:

Jonas Bech Hansen, ACE Denmark
Gunn Gallavara, The Norwegian Agency of Quality Assurance in Education (NOKUT)
Mirella Nordblad, Finnish Higher Education Evaluation Council (FINHEEC)
Viveka Persson, The Swedish Higher Education Authority
Julia Salado-Rasmussen, The Danish Evaluation Institute (EVA)
Karl Weigelt, The Swedish Higher Education Authority.

# 2 NATIONAL CONTEXT

In this chapter, we briefly describe the characteristics of the external quality assurance approaches and the status of the development of national qualifications frameworks in the Nordic countries. In most cases, the process of developing the national qualifications framework is closely linked to the implementation of learning outcomes and it makes an important common starting point for discussing the role of learning outcomes in the national external quality assurance processes.

# 2.1 Denmark

#### **External quality assurance in Denmark**

Accreditation of higher education programmes was introduced by law in Denmark in 2007<sup>2</sup>, and has since been the primary approach to external quality assurance in Denmark. The system is, however, dual in the sense that external examiners take part in the assessment of students' achieved learning outcomes in minimum 1/3 of the ECTS-points of a programme covering the central parts including the final project or thesis. The external examiners decide on the grading of the students in collaboration with course teachers. The function of the external examiners is to guarantee the professional and academic integrity of an examination and securing the legal rights of the students. The use of external examiners will not be elaborated here, but it is important to keep in mind to understand the duality and full scope of the external quality assurance of higher education in Denmark.

Accreditation is mandatory and a precondition for attaining public funding for both new (ex-ante) and existing higher education programmes (ex-post). All programmes have to live up to a set of criteria that define minimum standards of quality and labour market relevance. The operational responsibility for accreditation is divided between ACE Denmark and the Danish Evaluation Institute (EVA). Currently, ACE Denmark undertakes tasks related to accreditation of university programmes while EVA conducts accreditation of academy profession programmes (short cycle), professional bachelor's programmes and diploma programmes (first cycle) and bachelor's programmes in arts/fine arts (first cycle) and master's programmes in arts/fine arts (second cycle).

EVA and ACE Denmark use different sets of criteria, but in all cases the assessments are made by panels of experts on the basis of a self-evaluation report and a site visit (existing programmes) or an application (new programmes). New programmes can either get a positive accreditation or refusal of accreditation, which means that the programme cannot be offered by the institution. Existing programmes can also get a conditional accreditation, which implies a follow-up process within a year or two. The experts overall recommendation is made on the basis of the criteria as a whole; meaning that all criteria do not have to be fulfilled for the programme to be awarded a positive accreditation. In the end, the accreditation decision is made by the Accreditation Council.

Starting July 2013, the focus of the Danish accreditation system will change from programmes to institutions, and the entire higher education area will be covered by the same legislation and accreditation criteria. All accreditation activity will be organised by the Danish Accreditation Institution (an expansion of what is now ACE Denmark). EVA will be responsible for thematic evaluations of higher education. The new framework will emphasise the internal responsibility for the quality assurance processes at the institutions.

<sup>&</sup>lt;sup>2</sup> Act on the Accreditation Agency for Higher Education, Act no. 294 of 27 March 2007.

#### National qualifications framework in Denmark

The current Danish National Qualifications Framework for Higher Education (NQF-HE) was introduced in 2008 and replaced the former framework from 2003. The Danish NQF-HE consists of three elements: 1) description of learning outcomes in knowledge, skills and competences, 2) description of levels and 3) description of degree type descriptors. The Danish NQF-HE went through a process of self-certification in 2009 and was asserted to be compatible and in alignment with the Overarching Framework of Qualifications for the European Higher Education Area (QF-EHEA).

The Danish National Qualifications Framework for Lifelong Learning (NQF) was approved in 2009. The framework is organised as an eight level structure with level descriptors. The level descriptors are based on the concept of learning outcomes, which are described in terms of knowledge, skills and competences. The framework was referenced to the European Qualifications Framework for Lifelong Learning (EQF) in 2011 and all criteria and procedures were fulfilled. Inclusion and placing of higher education degrees in the Danish NQF is assured through the national system of accreditation (The Danish Evaluation Institute, 2011). All higher education degrees should by 2012 refer to the Danish NQF and EQF.

#### 2.2 Finland

# **External quality assurance in Finland**

The national quality assurance framework of higher education in Finland encompasses the Ministry of Education and Culture, the Finnish Higher Education Evaluation Council (FINHEEC) and the higher education institutions (HEIs). The higher education institutions are responsible for the quality of their education and other operations<sup>3</sup>. The Ministry of Education and Culture has the main steering and decision making power including performance based funding to higher education institutions, entitlement to award degrees, and operational licences of the universities of applied sciences. The role of FINHEEC as a national quality assurance agency is to assist the higher education institutions and the Ministry of Education and Culture in matters related to higher education and support the higher education institutions in the development of their quality systems through evaluation and other activities. The Finnish higher education institutions (i.e. universities and universities of applied sciences, UAS) have a legal obligation to regularly undergo external evaluations of their operations and quality systems.

FINHEEC has conducted audits of HEIs' quality systems since 2005. All Finnish HEIs have been audited once by FINHEEC and four institutions have so far participated in the second round of audits that started in 2012. The FINHEEC audit focuses on the procedures and processes that the institution uses to maintain develop and ensure the quality of its education and other operations. A guiding principle of the audit is the enhancement-led evaluation. The aim is to help HEIs to identify strengths, good practices and areas in need of development in their own operations. All institutions are evaluated against the same set of criteria as well as against the objectives set by the institution itself. The audits are carried out by independent teams of experts (national or international) usually comprising of 5-6 equal team members. The audit teams include experts from higher education sectors as well as one student representative and one working life representative.

#### National qualifications framework in Finland

Finland does not currently have a national qualifications framework (NQF) or other legislative framework that would either demand the higher education institutions to describe their qualifications in terms of learning outcomes or that would function as a reference in external quality assurance of higher education.

<sup>&</sup>lt;sup>3</sup> The autonomy of HEIs is also stated in the Finnish Universities Act (558/2009) and Polytechnics Act (564/2009)

However, in Finland there are government decrees<sup>4</sup> which set the general aims for university and UAS degrees. These decrees could be seen as setting some very broad learning outcomes for higher education qualifications, although learning outcomes as a term is not mentioned in the decrees.

The adoption of the National Framework for Qualifications and Other Learning in Finland has been very much delayed. The first legislative proposal on the framework was submitted by the Finnish Government to the Parliament in 2010. A second proposal based on the first one was submitted in May 2012. The aim was that the NQF would be adopted from the beginning of 2013; the law is yet to be approved. The proposed framework includes eight levels and is mainly based on the European Qualifications Framework for Lifelong Learning (EQF) but consideration has also been given to the Overarching Framework of Qualifications for the European Higher Education Area (QF-EHEA). The bachelor's degrees (universities and universities of applied sciences) are at level 6, master's degrees (universities and universities of applied sciences) at level 7, and licentiate and doctoral degrees (universities) at level 8. As in the EQF, learning outcomes of qualifications and other extensive competence entities are described in terms of knowledge, skills and competences. Regardless of the fact that Finland does not have a NQF, many higher education institutions are implementing learning outcomes based (or competence based) curricula and some institutions are already basing their degrees on the proposed NQF. For instance, Arene (Rectors' Conference of Finnish Universities of Applied Sciences) has issued a recommendation regarding generic competences for bachelor's and master's level UAS degrees which many UASs are following. Arene's recommendation is based on the EQF and the proposed NQF, Dublin descriptors, Tuning competences as well as projected needs of working life.

# 2.3 Norway

# **External quality assurance in Norway**

The Norwegian quality assurance system and the Norwegian Agency for Quality Assurance in Education (NOKUT) were established in 2003. NOKUT conducts quality controls and stimulates the quality development of the educational activities in universities and university colleges. The external quality assurance mechanisms are:

- Evaluation of the quality assurance system at all institutions in cycles of no more than six years.
- Accreditation of new study programmes. An institution without the authority to establish study programmes must apply for accreditation by NOKUT. The authority of an institution depends on the institutional category. The universities have full accreditation authority and can establish new study programmes at all levels. University colleges normally have the authority to establish new study programmes at bachelor's degree level and private institutions normally must apply to NOKUT for accreditation of all study programmes at all degree levels.
- Control of established activities. Any institution may have any study programmes controlled to determine whether it complies with the accreditation standard.

A higher education institution with authority to decide which study programme and disciplines the institution will provide, establishes a new study programme on its own authority, without applying to NOKUT. When a study programme is accredited or a higher education institution has established a study programme on its own authority, it is NOKUT's mandate to assess the quality, including the learning outcomes, of the study programme. All assessment as audit, accreditation or control of established

<sup>&</sup>lt;sup>4</sup> Government Decree on University Degrees (794/2004) and Government Decree on Polytechnics (352/2003 with amendments)

activities are done by committees of external experts on the basis of the institutions self-evaluation report related to the Regulations concerning NOKUT's supervision and control of the quality of Norwegian higher education.

# National qualifications framework in Norway

The Norwegian Qualifications Framework for Lifelong Learning (NQF)<sup>5</sup> was approved by the Ministry of Education and Research 15 December 2011. The NQF have seven levels (2-8) with higher education qualifications at levels 6, 7 and 8 (first, second and third cycle).

The qualifications framework and learning outcomes for higher education (first, second and third cycle) was approved in March 2009 - more than two and a half years before the NQF. Descriptors of the learning outcomes for the intermediate qualification, University College Graduate, were approved in December 2011. The qualifications framework and learning outcomes for higher education is integrated in the NQF and placed at the three upper levels. These three upper levels are based both upon the European Qualifications Framework for Lifelong Learning (EQF) and the Framework for Qualifications of the European Higher Education Area (QF-EHEA).

The Ministry of Education and Research has decided the main intent of the NQF. The NQF and its learning outcomes descriptors are to be used as a transparency tool to improve communication and understanding of the qualifications. The overall aim is to improve the communication between the educational sector and the labour market and making it easier to compare Norwegian qualifications enrolled in the NQF with qualifications from different countries' national qualifications systems.

All Norwegian higher education was expected to implement learning outcomes in all study programmes using the descriptor categories knowledge, skills and general competences by the end of 2012. Only degrees are considered as full qualifications enrolled in the NQF. Compliance with the NQF and the learning outcomes is included in the Regulations concerning NOKUT's supervision and control of the quality of Norwegian higher education (January 2011)<sup>6</sup>.

# 2.4 Sweden

# **External quality assurance in Sweden**

The Swedish Higher Education Authority is the national quality assurance agency that is responsible for<sup>7</sup>:

- Quality evaluations of first, second and third cycle courses and programmes
- Appraisal of entitlement to award qualifications.
- Examination of short courses, not leading to a degree

From 2011 to 2014, the Authority performs national quality evaluations of first and second cycle education, covering education within main fields of study of bachelor's and master's degrees as well as complete programmes leading to professional qualifications. The objects of evaluation are thus identified in relation

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<sup>&</sup>lt;sup>5</sup> The Norwegian Qualifications Framework for Lifelong Learning http://www.regjeringen.no/upload/KD/Vedlegg/Internasjonalt/engelskoversettelse.pdf

<sup>&</sup>lt;sup>6</sup> Regulations concerning NOKUT's supervision and control of the quality of Norwegian higher education <a href="http://www.nokut.no/Documents/NOKUT/Artikkelbibliotek/Norsk utdanning/Forskrifter Kriterier mm/Regulations">http://www.nokut.no/Documents/NOKUT/Artikkelbibliotek/Norsk utdanning/Forskrifter Kriterier mm/Regulations</a> concerning NOKUTs supervision and control of the quality of Norwegian higher education.pdf

<sup>&</sup>lt;sup>7</sup> The instruction (2012:810) for Universitetskanslersämbetet

to entitlements to award specific qualifications in the main fields of study. HEIs are free to establish which main fields of study they wish to. The result of the evaluation process — an initial evaluation that, if the quality is deemed inadequate, is followed up by a review one year later — may be that the entitlement to award a qualification in a specific main field of study or professional qualification is revoked. Quality evaluation may to this extent be regarded as a kind of re-accreditation.

To conclude, an important trait of the Swedish system is the central role of national learning outcomes. Noteworthy is also that the entitlement to award qualifications and the external quality assurance processes are not necessarily tied to specific programmes but to main fields of study. The object of external evaluation may as well be a bundle of different programmes leading to a given degree or simply a set of courses within a subject that may make up the main field of study of a given qualification. In this report, the term programme will be used for everything described in above.

# National qualifications framework in Sweden

In accordance with the Framework for Qualifications of the European Higher Education Area (QF-EHEA), the Swedish Qualifications Framework of Higher Education has since 2007 comprised of three cycles of higher education and of higher education degrees. The Higher Education Act contains a set of highly general requirements for each cycle, including a set of descriptors that in a general way characterises learning outcomes, namely in terms of the kinds of knowledge, skills and competences that the students shall develop through education within the given cycle. In the National Qualifications Ordinance, all higher education qualifications that may be awarded are listed. For each qualification there are national descriptors, including statements of learning outcomes. These are grouped into three forms of knowledge that students are required to demonstrate for the award of the qualification: knowledge and understanding, competence and skills, and judgement and approach. All general qualifications in Sweden are subject to the same set of generic descriptors. To a limited extent the NQF can be supplemented and further specified by local requirements and descriptors.

<sup>-</sup>

<sup>&</sup>lt;sup>8</sup> The Higher Education Act, Chapter 1. 8–9 §§.

<sup>&</sup>lt;sup>9</sup> The Higher Education Ordinance, Annex 2.

# 3 ANALYSIS OF LEARNING OUTCOMES IN EXTERNAL QUALITY ASSURANCE PROCESSES

In this chapter, we explore how learning outcomes are implemented in the Nordic quality assurance processes, we analyse the assessment of learning outcomes and results of using them in external quality assurance processes and the strengths and limitations in the way learning outcomes are applied in the external quality assurance processes in each country. Each agency has chosen to focus on themes of special interest from their country; hence, the country sections are not identical in structure and content.

#### 3.1 Denmark

In this section, we will focus on the implementation of learning outcomes and analyse the assessment of learning outcomes by ACE and EVA. We will describe the criteria related to learning outcomes, the material used in the assessment and the experiences of using learning outcomes in assessing new and existing programmes. Lastly, we will discuss strengths and limitations in the way learning outcomes are applied in accreditation in Denmark based on both ACE's and EVA's experience.

# 3.1.1 ACE Denmark: Implementation of learning outcomes

Traditionally, Danish university study programmes have been described in broad terms of objectives, and the specific subjects have mostly been defined by their content and curriculum. The focus on students' learning outcomes was introduced in 2003 with the first national qualifications framework. Since then, the institutions have taken on the task of developing and revising the descriptions of their study programmes. It was included in the legislation for the universities in 2007 with the introduction of a new grading system and accreditation. In the accreditation criteria for university programmes, it is specified that the learning outcomes have to meet the requirements of the national qualifications framework.

There are five accreditation criteria for university programmes:

- 1. Demand in the labour market
- 2. Research base and connection with an active research environment of high quality
- 3. Academic profile and learning outcomes
- 4. Structure and organisation
- 5. Continuous internal quality assurance

As shown in Figure 1, the learning outcomes of a programme are assessed in relation to the title, the NQF-HE and the learning outcomes of the courses. However, learning outcomes also play a part in the assessment of the labour market demand of new programmes and the research base. In all cases, the assessment takes a starting point in the intended learning outcomes as they are described in the study regulations of the programme.

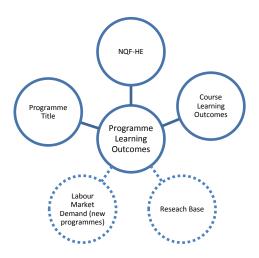


Figure 1: Learning outcomes in the accreditation criteria at university level

The assessment of learning outcomes is based on an analysis of alignment between the NQF-HE, the programme and course learning outcomes and the examination types. Furthermore, the consistency between the programme learning outcomes and the title of the programme is assessed. The alignment relates to the content as well as the level of the programme, and the assessment considers the learning outcomes as they are written in the study regulations. The study regulations and the self-assessment/application can be seen as the main documents in this regard. In addition, the institutions are expected to make the alignment analysis of the NQF-HE, the learning outcomes of the programme and the courses. In most cases, this analysis is made for the purpose of accreditation. On the site visits, the alignment analysis might be elaborated with the students' perspective on the relation between the intended learning outcomes and the content of the courses as well as their perceived learning progression.

The assessment of the research base of the programme includes an analysis of how the research areas that are represented at the institution cover the content of the programme. The institutions are expected to document this cohesion. This assessment is also related to the level of the programme considering that a lack of research competencies within an important area might compromise the academic standards of the programme.

In the accreditations of new programmes, the intended learning outcomes of the programme also form the starting point for the analysis of the demand in the labour market, which is mandatory when applying for a new university programme. The expert panels assess the cohesion between the results of the labour market analysis made by the universities and the content and level of the intended learning outcomes.

# 3.1.2 ACE Denmark: Analysis of assessment of learning outcomes

# Analysis of assessment of new programmes

Figure 2 gives an overview of the assessments of the 34 new university programmes that were presented by ACE Denmark to the Danish Accreditation Council in 2012. The figure shows the amount of fully, partly or not fulfilled criteria.

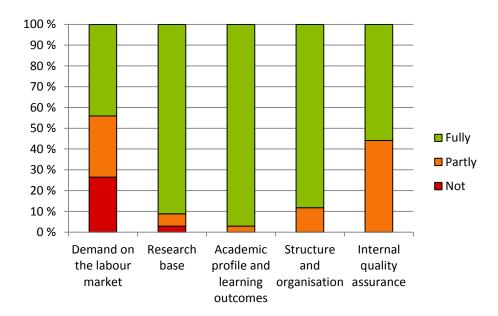


Figure 2: Assessment of the five accreditation criteria for new university programmes in 2012 (34 programmes)

The many positive assessments of the academic profile and learning outcomes indicate that the universities generally have succeeded in creating new programmes with intended learning outcomes that live up to the NQF-HE on a descriptive level. Moreover, the assessments of the structure and organisation suggest that they have planned for a sufficient academic progression, which means that the students will be able to actually achieve the learning outcomes of the programme.

What is also interesting is the assessment of the labour market demand. 9 programmes did not fulfil this criterion and 10 only fulfilled it partly. All of the 9 programmes that did not fulfil the criterion were refused accreditation. One of the assessments which the panels made in this regard concerns the involvement of employers in the development of the programme. It is important that the universities document that the programme has been discussed with employers before applying for accreditation, and that their feedback is applied in the description of learning outcomes and content and the general planning of the programme.

However, the employers often have a different approach to describing their needs than the way learning outcomes are written by the universities and ultimately in the NQF-HE. As a result, they might find that a programme is too academic and does not prepare the students sufficiently for working life. The negative assessments in Criterion 1 are often related to issues where the employers only discuss the programme on a very superficial level and are unable to give sufficient feedback on the academic content of the programme. It might also be that the universities are unable to translate the employers' needs into academic standards.

The gap between how learning outcomes are described in the NQF-HE and the employers' specific needs is a general issue, which ACE Denmark has discussed with the stakeholders in the accreditation process. It has been put forward that learning outcomes are mostly described for internal purposes at the universities and that they are too abstract to be used by employers who are looking for specific profiles. As a consequence, new programmes that are unknown to the employers cannot rely on the learning outcomes to communicate the contents and employability of the students.

# Analysis of assessment of existing programmes

In 2011-2012, a total of 289 university programmes were accredited ex-post by ACE Denmark. 56 programmes obtained a conditional accreditation, which implies a follow-up process within 1 year or two. Figure 3 gives an overview of the criteria assessments for these 56 programmes.

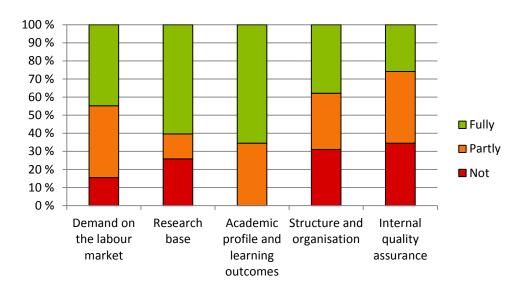


Figure 3: Assessment of programmes with conditional accreditation 2011- 2012 (58 programmes)

Figure 3 indicates that the decision on conditional accreditation is based on problems in a variety of the criteria and that the criteria regarding learning outcomes are not necessarily decisive. "Academic profile and learning outcomes" even seems to be the least decisive criterion. Looking into the details of the assessments it is, however, possible to identify some qualitative tendencies concerning the causes of the negative assessments related to learning outcomes.

The issues addressed in the criterion about academic profile and learning outcomes are related to the description of the intended learning outcomes in the study regulations and their alignment with the NQF-HE as well as title of the programme. Close to 90 % of the 289 accredited programmes in 2011-2012 were fully compliant with this criterion. This indicates that the universities have generally succeeded in writing learning outcomes for the programmes that comply with the NQF-HE (there are around 1050 university programmes in total). However, it should be noted that in some cases, issues regarding the alignment with the NQF-HE are addressed by the panels and adjusted by the institutions before the actual assessment is made.

The alignment between the learning outcomes of the programme and the courses is assessed on the study regulation which only on very rare occasions does not include full descriptions of learning outcomes. The most typical issues in the conditional accredited programmes concern the structure of the programme and the lack of academic progression between the courses. This indicates that although the intended learning outcomes of the programme might be aligned with the descriptors in the NQF-HE, the structure and content of the courses do not necessarily provide a sufficient basis for the students to actually achieve the learning outcomes of the programme. This might be the case when institutions fail to offer research-based courses or academic supervision within central areas of a programme, or when a programme only introduces a given theoretical framework to the students even though the intended learning outcomes of the programme state that the students also should be able to apply it to a problem. In some cases, these problems can be related to the lack of research competencies within the specific area which is then addressed in the criteria about the research base of the programme.

# 3.1.3 EVA: Implementation of learning outcomes

Learning outcomes have a central position in EVA's programme accreditation procedures and are integrated in many of the criteria for accreditation of both new and existing programmes. The Danish NQF-

HE is included in the executive order on accreditation which cover academy profession programmes, professional bachelor's programmes and diploma programmes<sup>10</sup>, but not in the executive order on accreditation which cover bachelor's programmes in arts/fine arts and master's programmes in arts/fine arts<sup>11</sup>. In December 2009, the description of the artistic bachelor and master programmes was introduced as an addition to the Danish NQF-HE. As regards EVA's programme accreditations, in the following we will focus on how learning outcomes are applied in academy profession programmes, professional bachelor's programmes and diploma programmes.

There are 10 criteria for accreditation of new programmes (ex-ante) and 17 for accreditation of existing programmes (ex-post).

In ex-ante accreditation 6 out of a total of 10 criteria concern learning outcomes:

- The intended learning outcomes are corresponding with the labour market demand
- The intended learning outcomes are at the right level, compared with the national qualifications framework
- The programme design (admission requirements, internship, internationalisation) is suitable for the intended learning outcomes
- The programme's content and design and the teaching and study methods used are suitable for the intended learning outcomes
- The qualifications and competences of the teachers are adequate for the degree level and the intended learning outcomes
- The physical facilities and material resources are suitable for the intended learning outcomes.

In ex-post accreditation 6 out of a total of 17 criteria concern learning outcomes:

- The intended learning outcomes are at the right level, compared with the national qualifications framework and there is appropriate coherence between the intended learning outcomes of the programme and the programme's parts
- The programme's content and design and the teaching and study methods used are suitable for allowing the students to achieve the learning outcomes
- The qualifications and competences of the teachers are adequate for the degree level and the learning outcomes
- The physical facilities and material resources are sufficient compared to the learning outcomes
- Tests and examinations ensure an adequate illustration of whether or not the student has attained the intended learning outcomes
- Graduates achieve the intended learning outcomes satisfactory.

<sup>10</sup> Executive Order on Accreditation and Approval of Vocational Academy Programmes and Professional Bachelor's Programmes etc., Ex. Order No 684 of 27 June 2008.

<sup>&</sup>lt;sup>11</sup> Executive Order on Accreditation and Approval of Higher Education Study Programmes under the Ministry of Culture, Ex. Order No 1174 of 01 of December 2008.

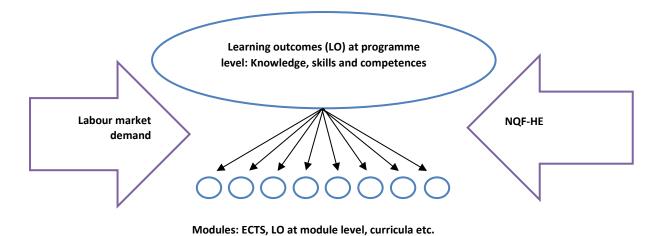


Figure 4: EVA's assessment of learning outcomes in accreditation

EVA's assessment in accreditation is based on the following documents.

- A self-evaluation report or application by the HEI
- Relevant regulations from the Ministry of Science, Innovation and Higher Education, e.g. national executive orders and curriculum
- The National Qualifications Framework for Higher Education
- Site-visits (only existing programmes).

# 3.1.4 EVA: Analysis of assessment of learning outcomes

# Analysis of assessment of new programmes

In EVA's approach, the accreditation of new programmes is separated in two processes: one accreditation of the education programme (3 criteria) and one accreditation of the local provision of the programme (7 criteria) and thus a total of 10 criteria. This is due to the fact that most academy profession programmes, professional bachelor's programmes and diploma programmes are based on national executive orders and curriculum. Thus, the institutions can cooperate when applying for a new education programmes, whereas each institution has to apply for offering the programme at their institution at a certain local provision.

From 2008-2012, a total of 86 education programmes and 226 local provisions were accredited ex-ante by EVA. 29 % of the applications for education programmes and 10 % of the applications for new local provisions did not fulfil the criteria and were therefore not accredited.

EDUCATION PROGRAMMES	Positive assessment	Negative assessment
Criterion 1: Relevance and demand	84 %	16 %
Criterion 2: Learning outcomes	72 %	28 %
Criterion 3: Structure	94 %	6 %
Total	71 %	29 %

EDUCATION LOCATION	Positive assessment	Negative assessment
Criterion 1: Demand and labour market contact	96 %	4 %
Criterion 2: Internship	98 %	2 %
Criterion 3: Structure	95 %	5 %
Criterion 4: Knowledgebase	95 %	5 %
Criterion 5: Academic environment	96 %	4 %
Criterion 6: Facilities and resources	99 %	1 %
Criterion 7: Quality assurance	97 %	3 %
Total	90 %	10 %

Table 1. EVA's recommendation for accreditation of new programmes and local provisions (EVA, 2012 p.36)

As described above in Table 1, learning outcomes are a central part of many of the criteria. In the following, it will be discussed how learning outcomes have worked in three criteria for new programmes: criterion 2 for new education programmes and criteria 3 and 5 for new local provisions.

Table 1 shows that in 28 % of the applications for new education programmes, criterion 2 "learning outcomes" was not fulfilled. In criterion 2, the assessment is based on an analysis of whether the programme's learning outcomes corresponds with the labour market demand and whether there is an alignment between the programme's learning outcomes, the NQF-HE, and the learning outcomes of the modules. Thus, the relatively high number of rejections shows that some institutions still have difficulties in aligning the learning outcomes to the labour market demand, the NQF-HE and the learning outcomes of the modules. In these cases the experts for example found that the programmes' learning outcomes were not aligned with the qualifications levels described in the NQF-HE. In some cases the theoretical level of the programme was described on a too high level compared with the NQF-HE (the programmes were rarely described at a lower level) or the description of the programme's learning outcomes was just unclear to the expert panels. A general challenge for the experts in assessing criterion 2 was that the descriptions of the programme's learning outcomes in some cases almost were a copy of the NQF-HE with some keywords from the subject area. Thus, it was more difficult for them to check the alignment with the labour market demand and the modules. Furthermore, this indicates that there is a risk that the learning outcomes are solely described for the accreditation process and not used as a tool by the institution in their everyday work with the programme.

In 5 % of the applications for new local provisions, criterion 3 "structure" was not fulfilled. In criterion 3, it is assessed, among other things, whether the programme's teaching and study methods are suitable for the content and design of the programmes and the intended learning outcomes. The experts have in some of these cases found it hard to assess whether the teaching and study methods were suitable for the learning outcomes. Not because the learning outcomes of the programmes were unclear but because the descriptions of teaching and study methods often were quite generic.

In 4 % of the applications for new local provisions, criterion 5 "academic environment" was not fulfilled. In criterion 5, it is assessed whether the qualifications and competences of the teachers are adequate for the degree level and the intended learning outcomes and whether there are other relevant programmes being offered at the location. The learning outcomes and the NQF-HE are in many cases seen as a useful tool to

assess the academic environment at the local provisions. The assessment was based on the institution's description of other relevant programmes at the local provision or at the institution, the curriculum vitae of teachers already employed at the institution, and descriptions of the planned recruitment, e.g. a teacher in engineering. The low number of not fulfilled criteria is thus related to the fact that many of the institutions already got solid academic environments at their different local provisions.

#### Analysis of assessment of existing programmes

In accreditation of existing programmes, EVA looks at both intended and achieved learning outcomes. As mentioned in the introduction to the chapter the actual assessment of the students work is done by the teacher and the external examiners. It is therefore important to have in mind that it is the external examiners who are doing the actual assessments of achieved learning outcomes, whereas EVA looks at the result of that assessment – the grades. This is due to a high degree of trust to the external examiners system, which is controlled and continuously evaluated by the Ministry of Science, Innovation and Higher Education.

In the self-evaluation report (criterion 17) the institutions are asked to describe the graduate's grades, so that the experts can assess whether they are achieving the learning outcomes sufficiently. EVA sets a marginal value based on the data that the institutions deliver. EVA sets the marginal value by calculating: the amount of grades on level 2 (lowest passed grade) may maximum be 33 percent <sup>12</sup> higher than the average for the programme nationwide. If the institutions data is above the marginal value, the institutions have the opportunity to send in additional information to explain why they have exceeded the maximum value. Around 17 percent of the institutions data are above the marginal value and institutions therefore send additional information. However, only one of the 89 programmes assessed from 2008-2012 received a conditional-fulfilled criterion 17.

The small number of negative judgements reflects both that the institutions are doing a good job in ensuring that the students are achieving the learning outcomes, but may also reflect that it is difficult to make a "hard" judgement based on the material in the self-evaluation report. The institutions are typically aware of the high number of low grades and have plausible explanations for the grades; for example that the students' entry grades were lower than the average for the programme nationwide and that they have students with a low level of educational competence. Another explanation can be that the number of students in the class is low and that each individual therefore has a big influence on the average data.

EVA's report shows that the expert panels accept these explanations when the institutions have initiated activities that can support the student's study competences (for example individual guidance or courses to prevent examination anxiety) and when the institution in general shows that the learning outcomes are aligned with the NQF and learning outcomes of the programme's elements (criterion 6), content and structure of the programme is satisfactory (criterion 7), and the test and exams are reasonable (criterion 16).

In many cases, the learning outcomes were implemented just before the accreditation processes started. The programmes were therefore structured based on the former goals and the grades had been given after these goals and not learning outcomes. In practice this was often not an issue since the former goals were changed to learning outcomes without any fundamental changes in the programme's structure or content.

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<sup>&</sup>lt;sup>12</sup> In some cases the value was set to 25 percent higher than the average.

# 3.1.5 Analysis of strengths and limitations in the way learning outcomes are applied

In this section we will focus on the strengths and limitations in the way learning outcomes are applied in accreditation in Denmark based on both ACE and EVA's experience.

# A starting point for assessing academic levels and progression

First of all, the accreditations processes in Denmark have shown that the concept of learning outcomes is a clear and concise tool for assessing if a study programme is composed in a way that makes it possible for the students to achieve the goals and intentions of the programme. Thus, in both ACE's and EVA's accreditations the assessment of a programme takes a starting point in the learning outcomes. ACE uses learning outcomes in 3 out of 5 criteria. In EVA's accreditation of new programmes 6 out of 10 criteria concern learning outcomes and in accreditation of existing programmes 6 out of 17 criteria concern learning outcomes. The institutions' documentation of the alignment between learning outcomes at the programme level and the course or module level has made it possible for the expert panels to assess if the learning outcomes at course or module level cover the necessary subject areas and are on the right academic level.

However, the total of the programme is more than the sum of the parts, and the complex relation between the different levels of learning outcomes has proved difficult for the institutions to document in writing. Furthermore, the accreditation criteria focus on descriptions of modules or courses, examination types and in some cases teaching methods, but the institutions might also argue that other learning activities are relevant for the student's achievement of the overall goals. In these cases, it can be a challenge for the panels to assess the alignment within the framework of the criteria.

# A transparency tool for students, stakeholders and labour market

An important aspect of the accreditation process in Denmark has been to assure the quality of learning outcomes as a means to create transparency for the students and stakeholders in general. It has accelerated an on-going process at the institutions where learning outcomes are described for programmes and modules or courses. This process has made it increasingly clear to the student what they can expect to achieve when they finish their study. Moreover, the institutions have had the opportunity to consider whether their programmes are planned in alignment with the learning outcomes and the NQF-HE. The accreditation has thus served as a mechanism for consumer (student) protection. So far, the method has succeeded in identifying programmes where the learning outcomes were not sufficiently supported by the structure and content of the programme or by sufficient resources at the institution.

Regarding learning outcomes as a transparency tool for stakeholders in the labour market, the Danish accreditation processes have approached the topic on different levels. First, the employer representatives in the accreditation panels are expected to critically assess whether the learning outcomes take the labour market needs for knowledge, skills and competences into account. By taking a starting point in the learning outcomes of the programme, the employers should be able to make the assessment even though they typically do not know the specific curricula and teaching methods of the programme. Second, in the accreditation criteria for new university programmes, the ambition is that the institutions should involve employers in the development of the programme and in describing the learning outcomes.

# The challenges with learning outcomes being too specific or too general

The Danish NQF-HE and the descriptions of learning outcomes are deeply integrated in the criteria of accreditation. As mentioned above, it is a useful tool for comparison and alignment, which makes it easier to assess if the programme is on the right level. However, for the NQF-HE and the learning outcomes to be able to cover a wide range of programmes, they also have to be overarching. On the one hand, this is a strength because it makes them useful in all subject areas. On the other hand, it makes them very general.

At the same time, the learning outcomes descriptors are very specific in terminology. In the descriptors of ordinary higher education degrees in Denmark the distinction between *understanding and reflection level* for the academy profession degree and the professional bachelor's degree is:

"Must be able to understand the practice and **central** applied theories and methodologies as well as the profession's application of theories and methodologies" (academy profession degree).

"Must be able to understand the practice, applied theories and methodologies as well as to **reflect on the practice** and application of theories and methodologies of the profession" (professional bachelor's degree).

Thus, the distinction between the two degrees is the words "central" and "reflect on the practice". The consequence is that there has been a tendency toward the institutions copying the descriptors from the NQF-HE and just adding some subject-related keywords. Thus, it is hard for the experts to criticise these generically written learning outcomes if they are aligned with the NQF-HE. This is partly due to the fact that the assessment of the alignment between the learning outcomes and the NQF-HE has been given more attention in the guidance to the institutions and the panels than the assessment of the degree to which the learning outcomes are described in sufficiently specific way. However, there are no clear indications in the Danish accreditation framework as to how an adequate level of programme-specific details might be assessed.

If the learning outcomes are too general one could ask how they can serve as a useful tool for the institutions. Thus, there is a risk that the institutions will write the learning outcomes for the purpose of external quality assurance solely and not use them in their daily work. It is not possible to say whether this is the case today, but further investigation in this matter could be done to assess how learning outcomes works. All in all, the results of the Danish accreditations indicate that most institutions have implemented the NQF-HE in their descriptions of the programme. This suggests that now might be the time to start focusing on the problems with too generic learning outcomes in the assessments.

# How to use data about actually achieved learning outcomes in external quality assurance

Due to the external examiners system it has been fairly easy to include actually achieved learning outcomes in the external quality assurance processes in Denmark since the students grades are already external quality assured by the external examiners. The use of the data in the accreditations is, on the other hand, a topic of discussion. The discussions relate to two issues. First, the analysis of data: How low should the grades be to be problematic and how should it be calculated? As described above, EVA sets the marginal value by calculating the amount of grades on level 2 (lowest passed grade)). The institutions have problematized the use of the grades on level 2 since the grade means that the students have actually achieved the learning outcomes. Furthermore, the calculation is relative in relation to the average for the programme nationwide. This means that if all the programmes give low grades then no one will be higher than the average. The second issue is the interpretation of the data. Only one out of 89 programmes have got a conditional fulfilled criterion 17 because the institutions in most cases can give reasonable explanations to why their students have a higher number of low grades, e.g. low entry grades.

# 3.2 Finland

In this section, we will explore the role of learning outcomes in the FINHEEC audit model, with a special emphasis on the FINHEEC audit criteria. The materials used in the FINHEEC audits in relation to learning outcomes will also be discussed. This analysis of the FINHEEC audit model is based on self-evaluation reports and audit reports of the second round of FINHEEC audits. The section ends with a discussion on strengths and limitations in the FINHEEC audit model in relation to learning outcomes and some conclusions are drawn about the role of learning outcomes in FINHEEC audits.

# 3.2.1 Implementation of learning outcomes

Learning outcomes are not very prominent in FINHEEC's audit model, as the focus is on institutions' quality systems. FINHEEC's institutional audits are very extensive in scope covering quality policy and development of the quality system, operational and strategic management, quality management of HEI basic duties, and the quality system as a whole<sup>13</sup>. Nonetheless, there is a stronger emphasis on degree education in the new second round audit model in which three samples of degree education are evaluated as independent audit targets.

With regard to the sample degree programmes, the FINHEEC model looks for evidence of continuous, systematic development concerning the planning and implementation of education, the participation of different groups and stakeholders, as well as the effectiveness of quality work. These are the generic themes in the FINHEEC audit criteria and which the audit teams will need to evaluate when deciding on the development stage<sup>14</sup> of the quality management of the sample degree programmes. The content or the actual quality of education is not assessed in the audit. In the audit criteria for sample degree programmes, learning outcomes are mentioned as a subheading under planning of education (see Table 2 below). Clearly, learning outcomes can also be dealt in the audit with respect to the other subheadings presented in Table 2; especially if learning outcomes are implemented at the institution not only at descriptive level but more widely as an approach in teaching and learning as well as assessment.

PLANNING OF EDUCATION	IMPLEMENTATION OF EDUCATION	EFFECTIVENESS OF QUALITY WORK		
<ol> <li>Curricula and their preparation</li> <li>Intended learning outcomes and their definition, as well as the assessment of learning that supports the intended learning outcomes</li> <li>Links between research, development and innovation activities, as well as artistic activities, and education</li> <li>Lifelong learning</li> <li>Relevance of degrees to working life</li> <li>Participation of different personnel groups, students and external stakeholders.</li> </ol>	<ol> <li>Teaching methods and learning environments</li> <li>Methods used to assess learning</li> <li>Students' learning and wellbeing</li> <li>Teachers' competence and occupational well-being</li> <li>Participation of different personnel groups, students and external stakeholders.</li> </ol>	Suitability of key evaluation methods and follow-up indicators and their impact on the achievement of goals		

Table 2: FINHEEC audit criteria and self-evaluation themes with reference to sample degree programmes

The audit material, additional material that the audit team is allowed to request from the institution prior to and during the audit visit, as well as the audit visit with its interviews form the evidence on which the audit team bases its recommendation on whether the institution should pass the audit. The final decision regarding the audit results is made by the FINHEEC Evaluation Council.

The audit material, submitted by the institution prior to the audit visit, comprises of a basic material and a self-evaluation report. The institution's self-evaluation and the audit team's interviews form the main

<sup>13</sup> The FINHEEC audit manual <a href="http://www.finheec.fi/files/1780/KKA">http://www.finheec.fi/files/1780/KKA</a> 1512.pdf includes a complete list of audit targets and criteria.

<sup>&</sup>lt;sup>14</sup> A scale of four development stages of quality management is used in FINHEEC audits: absent, emerging, developing and advanced.

sources of information regarding learning outcomes for the audit team. The audited institutions decide how they carry out the self-evaluation. All four institutions, which have participated in the second round of FINHEEC audits, conducted the self-evaluation and produced the report only for the purpose of the audit. The guidance to the institutions regarding the content of the self-evaluation report is the same for all institutions and is described in the FINHEEC audit manual. Concerning the samples of degree education, the institutions are asked, among other things, to describe how the quality of the themes listed under planning and implementation of education in Table 2 are ensured. In other words, learning outcomes should at least be dealt in the institutions' self-evaluation reports under the heading "Intended learning outcomes".

# 3.2.2 Analysis of assessment of learning outcomes

It is clear from the analysis of the self-evaluation reports and final audit reports of the four HEIs, which have participated in the FINHEEC second round audits, that currently the FINHEEC model and criteria do not produce the same type of information on learning outcomes.

The four audited institutions have to a different extent dealt with learning outcomes in their **self-evaluation reports**. Three out of four self-evaluation reports included information for all three sample degrees on "Intended learning outcomes, their definition and assessment of learning that supports the intended learning outcomes". Learning outcomes were mentioned in connection to several other themes such as curriculum planning, methods used to assess learning, relevance for working life etc., but not necessarily comprehensively for all sample degree programmes in the self-evaluation report. In other words, there were also differences between sample degree programmes within the reports. Even though it is up to the institution to decide how they write the self-evaluation, it is still interesting that there are considerable differences between the sample degree programmes regarding the extent to which learning outcomes have been described in their self-evaluation. This clear variation could depend on how internalised and incorporated learning outcomes are in the degree programme in question. However, further evidence would be needed to verify this statement.

FINHEEC has a standard disposition for the **audit reports** and the audit team needs to refer to the FINHEEC criteria in their writing and evaluative judgements. Still, it is clear from this analysis that the contents in the reports and evaluation vary depending on the audit team and the writers. There is variation within and between the audit reports in relation to how learning outcomes are mentioned i.e. if it is in relation to curriculum planning, the definition of learning outcomes, assessment, student learning or relevance for working life etc. None of the reports addressed learning outcomes comprehensively from planning, implementation to assessment. One explanation for this is the broad focus of the audit. Evidently, it is not possible to cover every detail related to the six FINHEEC audit targets during a 3-5 day audit visit and in the report. The extent to which learning outcomes have been described in the institution's self-evaluation may also reflect how they are addressed by the audit teams. For example, in one institution's self-evaluation learning outcomes were barely mentioned and this was also the case with the audit team's report. One further explanation might be that the knowledge, experience and/or personal interests of the evaluators influence the content of the report. However, it should also be noted that to some extent other terminology has been used in the reports to discuss issues related to learning outcomes e.g. student-centred approach in teaching, learning and assessment.

# 3.2.3 Analysis of strengths and limitations in the way learning outcomes are applied

To indicate strengths and limitations in the FINHEEC audit model in relation to learning outcomes is not a simple exercise due to the fact that learning outcomes is one detail in an audit model that encompasses almost all activities of the HEI. In other words, no evaluative judgements can really be made of the functioning of the FINHEEC model in relation to learning outcomes, because of the focus of the model being elsewhere. However, based on the limited material available from the second round of FINHEEC audits (four self-evaluations and four audit reports), some conclusions can be made.

As already mentioned, the audit teams will need to refer to the FINHEEC criteria in their evaluation. However, the audit teams have the authority to decide which issues they consider important in the institution audited, i.e. which strengths, good practices and areas in need of development they want to emphasise. In making their evaluative judgement on the development stage of the quality management of the sample degree programmes, the audit teams are looking at the planning and implementation of education as a whole. Hence, although intended learning outcomes and their definition is listed in the criteria as a theme under planning of education, the audit teams are still not obliged to discuss learning outcomes during the audit visit and in their final report. The outcome of this approach is a variation in the content of the audit teams' evaluations and audit reports. The FINHEEC model in its current form is not producing coherent information on learning outcomes across the different audits. In other words, if a reader would like to look for the same information on learning outcomes in FINHEEC second round audit reports, this would not be possible.

Nevertheless, due to this flexibility in the model, it would be relatively simple to better incorporate learning outcomes in the model. All audit teams could be guided to address learning outcomes during their audit visit and in the final report. In general, FINHEEC would need to provide better guidance on how the different themes related to planning and implementation of education, including learning outcomes, should be addressed in the audits.

It can be argued that due to its focus there is no need to better incorporate learning outcomes in the current FINHEEC audit model. It is a question of what FINHEEC considers more important in terms of its approach; giving the expert evaluators some degree of freedom in focusing on issues they consider essential in relation to the quality management of the sample degree programmes or taking a structured approach to evaluate the sample degree programmes. Considering that learning outcomes is already listed in the audit criteria as well as being a key element of the NQF, which presumably will be adopted in Finland during 2013, a more systematic incorporation of learning outcomes in the FINHEEC audit would be justified. However, it is quite clear that the FINHEEC audit model 2012-2017, with its current broad focus, is not suited for putting a much stronger emphasis on learning outcomes.

# 3.3 Norway

In this section, we will focus on the implementation of learning outcomes and analyse the assessment of learning outcomes by NOKUT. In the analysis of assessment we have chosen to look at accreditation of new study programmes because only in this external quality assurance mechanism NOKUT has experience so far on conducting regular assessment of learning outcomes. We discuss criteria related to learning outcomes, the material used in the assessment, the role of external experts and the experiences of using learning outcomes in assessing new study programmes. Finally, we highlight strengths and limitations in the way learning outcomes are applied in accreditation in Norway.

# 3.3.1 Implementation of learning outcomes

NQF and learning outcomes descriptors are included in criteria and procedures by the Regulations concerning NOKUT's supervision and control of the quality of Norwegian higher education. The accreditation procedures have a central role as a quality assurance mechanism of qualifications in the NQF. An accredited study programme which gives a degree is also a recognised qualification in the NQF. In addition, in the implementation process, the NQF and learning outcomes are used as a pedagogical and didactical tool in design and development of programmes. In this context, the NQF and learning outcomes ensure the levels of qualifications, the difference between levels and the thematic content. NOKUT's main role in the work on NQF and learning outcomes is quality assurance and enrolment of qualifications in the NQF.

# Learning outcomes in evaluation of the higher education institutions' quality assurance systems (quality audit)

As part of their internal quality assurance system, the higher education institutions are committed to assess the study programmes, including the learning outcomes, feedback mechanisms and procedures for improvement. Through an evaluation procedure (audit) every sixth year, NOKUT decides on the recognition of the institutions' internal quality assurance system. The objective for an institution is an on-going quality improvement work and enhancement of quality in the educational activities.

It is expected that the institutions after implementing learning outcomes in their study programmes, include evaluation of learning outcomes in their quality procedures. If learning outcomes are included in an institution's quality procedures, NOKUT will evaluate the way they are operated. The institutions themselves develop methods to assess their own learning outcomes. NOKUT's assessment in quality audit is based on the following documents:

- The Act on university and university colleges (Ministry)
- Relevant regulations from the Ministry of Education and Research (Ministry)
- Regulations concerning NOKUT's supervision and control of the quality of Norwegian higher education (NOKUT)
- The document on the Norwegian qualifications framework (NKR-dokumentet<sup>15</sup>, Ministry)
- A self-evaluation report by the HEI

The assessments of quality assurance systems are conducted by external experts from higher education institutions like student representatives, representatives from the working life, teachers and researchers, or other highly competent and relevant persons. So far, NOKUT has conducted only a few audits including learning outcomes in HEIs' internal quality assurance systems.

#### Learning outcomes in accreditation or supervision and control of study programmes

The quality assurance of learning outcomes is directly linked to the NQF through the procedure for accreditation of new study programmes and the supervision and control of existing programmes, and is based on the regulation mentioned above. Subject-related learning outcomes descriptors of a study programme are written on the basis of the national generic learning outcomes descriptors at the relevant level. The following can be seen as the main documents regarding accreditation:

- The Act on university and university colleges (Ministry)
- Relevant regulations from the Ministry of Education and Research (Ministry)
- The document on the Norwegian qualifications framework (NKR-dokumentet, Ministry)
- The Ministry of Education and Research's document on the Norwegian qualifications framework (NKR-dokumentet)
- The accreditation regulations
- The guidelines on the accreditation regulation (for HEIs and external experts)
- A self-evaluation report by the HEI

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 $<sup>^{15}</sup>$  Det kongelige norske kunnskapsdepartementet: Nasjonalt kvalifikasjonsrammeverk for livslang læring (NKR), 2011  $\underline{\text{http://www.regjeringen.no/upload/KD/Vedlegg/Internasjonalt/UNESCO/NasjonaltKvalifikasjonsrammeverk200612.pd} \underline{f}$ 

Higher education institutions with restricted authority apply for accreditation of a study programme at the relevant level, and must fulfil the requirements set out by NOKUT. NOKUT has developed guidelines to help the institutions develop a satisfactory application. HEIs can also chose to take part in a seminar on how to write an application for accreditation.

Learning outcomes have a central position in NOKUT's accreditation regulation. In the criteria concerning the study plan (§ 4-2), 5 of total 8 criteria are directly related to learning outcomes of the study programme:

#### § 4-2 Study plan

- 1. The educational provision must have an adequate title.
- 2. The provision must be described with reference to learning outcomes:
  - a) Learning outcomes must be expressed in terms of a candidate's intended achievements in knowledge, skills and general competence, as related to the National Qualifications Frameworks.
  - b) The provision's relevance for working life and/or continued studies must be clearly expressed.
  - c) Content and design of the provision must be satisfactorily related to the description of learning outcomes.
  - d) Teaching and student work must be suited for the achievement of intended learning outcomes, as expressed in the plan.
  - e) Exams and other means of testing must be suited for the assessment of the students' attainment of intended learning outcomes, as expressed in the plan.
- 3. The provision must have satisfactory links to research and academic and/or artistic development work, adapted to its level, volume and other characteristics.
- 4. The provision must be attached to student exchange and internationalisation arrangements, adapted to its level, volume and other characteristics.

An application for accreditation of a new study programme is based on a self-evaluation report. In the self-evaluation, the HEIs give a presentation of the subject-related learning outcomes of the programme and the courses, and provide justification on how to achieve the learning outcomes. The accreditation procedure has two steps: 1) a preliminary review of the application by the NOKUT's secretariat and 2) an assessment by external experts. NOKUT's administration checks if e.g. the application is complete, all annexes are attached and the requirements are described and explained. The self-evaluation report must aim to demonstrate to the experts that the students, after having completed the study programme, meet the learning outcomes descriptors on the relevant level. The HEIs self-evaluation report is the most important document for the experts in the assessment work. The institution's ability to present itself can be crucial for the decision. It is important that the applicant gives a detailed account of and justification for their choices. It is a challenge that some applications are written by the administrative staff, and some of these lack the academic perspectives and a holistic view of the study programme.

The assessment by accreditation or control of established activities are done by a committee of external experts on the basis of the institutions self-evaluation report related to NOKUT's regulation on accreditation. Committees for accreditation of study programmes in first cycle normally include two academic experts from the higher education sector or other relevant competences. In second cycle, in addition to the requirement in first cycle, at least one of the experts must have international competence. Third cycle includes three academic experts and a doctoral student. Site visits are organised only in accreditations of third cycle programmes. The experts assess if it is possible to achieve the learning outcomes described for the study programme on the basis of the study plan, the discipline community (teachers and/or researchers), control the relevance in the labour market, support functions and infrastructure etc. All criteria have to be met in order to achieve an accreditation. NOKUT arranges training for the external experts on the regulation and on practices related to the accreditation procedure. It is obligatory to take part in the training which has a twofold goal 1) to prepare the external experts for the assessment and 2) to improve the consistency in assessments between the expert committees.

An accredited degree programme is a qualification in the NQF. All degree programmes like University College Graduate, Bachelor, Master or Ph.D., are by accreditation or self-accreditation autonomy enrolled in the NQF, and will be listed in the national and international databases. Accreditation of a study programme not leading to a degree, as for instance a specialisation of 60 ECTS in the healthcare sector or 1-

year programme in educational theory and practice, gives the learning outcomes and the NQF level of the programme, but no qualification in the NQF.

Present, only accreditation of new study programmes has been done fully on the basis of learning outcomes. In the control of existing study programmes NOKUT has done assessment of study programmes partly including learning outcomes descriptors.

# 3.3.2 Analysis of assessment of learning outcomes

As described above, so far, NOKUT's only regular assessments of learning outcomes are in accreditation of new study programmes. In this section, the focus is on analysing the results on how learning outcomes have worked in accreditation of new study programmes.

Since the requirement of learning outcomes descriptors were introduced in the accreditation regulation January 2011, NOKUT has received a total of 121 applications of accreditation (15.09.2012) of new study programmes from 46 higher education institutions or first time applicants with no former higher education study programmes. After assessment by experts 45 applications of study programmes have attained accreditation.

# Administrative preliminary review procedure

NOKUT's administration conducts a preliminary review of the applications on accreditation. The results of the initial review are either an assessment by experts or an administrative decision of rejection. The decision of rejection could be based on one criterion or several of them. Of the total number of 121 applications, 47 were given administrative decision of rejection.

Criterion 2, about learning outcomes, is a dominant reason of rejection especially for applications for accreditation of study programmes in first cycle, see Table 3 below. All institutions applying for accreditation in first cycle do not have self-accreditation authority and a number of these are applying for the first time. The Ministry of Education and Research is responsible for the national activities on implementing the National Qualifications Framework for Lifelong Learning and learning outcomes (like conferences, seminars, workshops etc.). The majority of these institutions did not take part in the activities because they were not established at the time the activities were organised. NOKUT gives guidance to these applicants in accordance with the agency's mandate on quality assurance. The Ministry does not provide regular information to new applicants or institutions on the basis and foundation of NQF and how to design disciplinary and subject-related learning outcomes descriptions. For first time applicants the available information is crucial. There is a need to facilitate regular training on basic principles and how to write learning outcomes for new applicants. The training could be part of NOKUT's guideline on how to apply for accreditation of a study programme or it could be organised by the Ministry.

As Table 3 shows, also other criteria are decisive for the decision. In second cycle 18 of 22 study programmes did not fulfil the requirement on the discipline community, § 4-3 in the regulation.

Level	Number of applica- tions per cycle	Total number of decision of rejection	§ 4-2 on the study plan (see page 27)				Other criteria
			Criterion 1 Name of the programme	Criterion 2 The learning outcome	Criterion 3 Links to research and academic and/or develop- ment work	Criterion 4 Student exchange and internatina- lisation arrange- ments	
First cycle	38	22	1	13	3	6	12
Second cycle	69	22	3	11	6	6	18
Third cycle	14	4	1	3	2	2	2
Total	121	47	5	27	11	14	32

Table 3 Administrative decision of rejection given to applications of accreditation of study programmes

Table 4 below, gives an overview of the decisions of rejection on the alignment between the learning outcomes and the elements in the study programme (§4-2 criterion 2). Most rejections are on the criteria 2c), 2d) and 2e). An administrative decision of rejection is given e.g. if the HEI did not divide the learning outcomes in the categories knowledge, skills and general competences, if the objectives were not written as outcomes or if the content and design is not related to the description of learning outcomes. The administrative decision of rejection of learning outcomes, on the basis of the alignment of the different elements in the study programme, was given to 27 of 48 applications. The institution may submit a new application for accreditation at the next application deadline. NOKUT has experienced that the applications has a better quality after a rejection when the HEI has used NOKUT's comments in enhancing the application. This assumes that NOKUT should continue the practice of rejection decisions including information on how the requirements can be met.

Cycles	Total number of adminis-	Study plan, § 4-2 criterion 2						
	trative rejection on criterion 2	a Learning outcomes	b Relevance	c Content and design	d Teaching and student work	e Exams and other means of testing must be suited for the assessment of the learning outcomes		
First cycle	13	8	7	13	10	10		
Second cycle	11	5	4	6	7	7		
Third cycle	3	2		2	2			
Total	27	15	11	21	19	17		

Table 4 The total number of rejection per cycle on criterion 2 given to applications of accreditation of study programmes.

#### Assessment by external experts

In addition to the study programmes given the administrative decision of rejection, seven applications did not fulfil the requirement on learning outcomes after assessment by external experts. All of these did not fulfil the requirements on criterion 2 on learning outcomes, see Table 5 below. The design of the accreditation criteria is inspired by the constructive alignment theory (see Biggs and Tang, 2007). All elements in the regulation are deliberate alignments between the planned learning activities and the learning outcomes. The learning outcomes of the programme have to be in line with the national generic learning outcomes descriptors at the relevant level according to the categories of knowledge, skills and general competences, and the thematic content. For some of the HEIs, the biggest challenge is to write relevant subject-related learning outcomes descriptors. The experts found in some applications no alignment between subject-related learning outcomes in modules and the learning outcomes of the study programme. In some study programmes learning outcomes are not written on the relevant level and certain are not thematically in line with the learning outcomes descriptors in the NQF. But for most of the institutions the challenge is to write a justification of the alignment between the different elements in the study programme. For example, this could be how the learning activities are appropriate for the task and how the examination arrangements provide information on the extent to which learning outcomes are achieved.

	Total applications	Study plan					
§ 4-2		<b>2</b> a	2b	<b>2</b> c	2d	<b>2</b> e	
First cycle	2	2	-	1	1	1	
Second cycle	3	3	2	3	1	1	
Third cycle	2	2	-	2	2	2	
Total number not fulfilled	7	7	2	6	4	4	

Table 5 Rejections given to study programmes after assessment by the external experts

If the application does not fulfil the accreditation criteria after assessment by the experts, the institution has the opportunity to comment on and make to some extent changes in the application. Most of the HEIs make changes in the applications on the basis of the experts' advice for enhancement. After a new assessment, the experts often find that the study programme has a better quality, and in many cases fulfil the criteria. The comments given in the administrative decision of rejection and in the assessment by the external experts can be understood as an enhancement process on writing learning outcomes and a better description of the alignment between the different elements in study programmes. As the accreditation procedure has shown, comments made e.g. by the external experts, are important for the further development and enhancement of the study programme. Developing and describing learning outcomes for study programmes is still a relatively new exercise for Norwegian HEIs. The deadline for implementing learning outcomes in Norwegian study programmes was 1. January 2013. Therefore, for a period of time, it is important to continue the guidance and feedback to the applicants in their work on learning outcomes.

# 3.3.3 Analysis of strengths and limitations in the way learning outcomes are applied

In this section the focus is on strengths and limitations in the way learning outcomes are applied in NOKUT's accreditation criteria. So far, NOKUT has systematic experience with assessing learning outcomes in accreditation of new study programmes, and limited experience in audit procedure and in control of existing study programmes.

#### Strengthening of the consistency in study programmes

NOKUT implemented the NQF and its learning outcomes descriptors in the regulation adopted in January 2011. This is the first Norwegian quality assurance regulation including NQF and learning outcomes.

The learning outcomes of study programmes are central in the accreditation regulation and help to ensure and provide more precision in the study plan. The higher education institutions are asked to write a holistic description and justification. In its application, the HEI have to explain and document how the different elements are aligned with each other. An accreditation of a study programme is an assessment based on the self-evaluation report and attachments like the study plan (curricula), the curriculum vitae of the discipline community (teachers and researchers), contracts and other relevant documents. The assessment is done on the basis of this description and justification. The self-evaluation report is the main document. Attachments like contracts and the study plan are to be read if the experts need further information. For example, the experts assess if the examination and assessment methods are suited to test whether the students have achieved the learning outcomes prescribed for the study programme. The purpose is the facilitation of the learning process, in addition to achievement of results. This model gives a holistic didactical assessment of the study programme and a better opportunity to reveal if the study programmes are well enough designed and composed. The experts have found that the designs of the study programmes are more thoroughly worked through and of better consistency and quality than under the former regulation. The way the learning outcomes descriptors are applied in the accreditation criteria can be understood as a quality assurance of the elements in the learning process, and an assessment of the probability of achieving the learning outcomes.

To write a holistic description and justification of the elements in the study programme is one of the biggest challenges in writing the self-evaluation report. Some of the self-evaluation reports are descriptive and the external experts find them difficult to assess because they lack information about the choices made while developing the study programme. Nonetheless, the HEIs are progressing; the quality of self-evaluations is rising for every application deadline. However, the quality of the self-evaluation reports can still be improved and therefore it is important that NOKUT continues the efforts to improve its guidelines on accreditation.

# Quality assurance of the qualifications levels

In the previous Norwegian external quality assurance regulation there was no common generic regulation of the level of a qualification, like the level description of a first cycle qualification. The discussion in the external expert committees about the level of qualifications was based on the experience and the professional judgement of the experts, and was dependent on the knowledge and competences of the members in the expert committees. The tradition in the subject area played the main role in setting the objectives for the study programme, teaching and student work etc. NOKUT's requirement of an alignment between the national generic learning outcomes descriptors in the NQF and the learning outcomes for the study programme gives a common understanding of the expectations of a qualification. Some experts have commented that it is easier to assess the level of the qualification after implementing the NQF because the NQF gives a common understanding of the level. The differences between the levels are written in generic keywords together with the academic requirements of the different levels. This way of describing the levels makes it easier to distinguish the levels apart. Of course, other actions might also influence like guidance to the experts.

Based on NOKUT's experience, the assessments carried out by external experts are now more consistent and show a more uniform level across the subject areas - without making the study programmes more comparable in design, content and structure. This is a quality assurance mechanism of the level of qualifications in Norway and ensures consistency of the qualifications with the level internationally.

It is always a risk that national generic learning outcomes descriptors can affect the development of more general and overarching learning outcomes descriptors of study programmes. A consequence could be an

increasing number of study programmes with quite similar learning outcomes descriptors. The intention of the work on qualifications frameworks is transparency in the communication between the educational system and the rest of the society, a tool for promotion of cross-border mobility and understanding of the educational system. Too similar learning outcomes descriptors will not facilitate the understanding of the qualifications and not promote transparency and mobility. NOKUT's guidelines mostly focus on the didactical elements of study programmes. In future guidelines NQF and learning outcomes as a communication tool are to be emphasised. NQF and learning outcomes descriptors have a function as communication tool to strengthen the understanding between educational system and working life.

# Assessing the relevance of the study programme

"The provision's relevance for working life and/or continued studies must be clearly expressed", is a requirement in the accreditation criteria. This means that HEIs are not required to give a description of the labour market relevance of a study programme. The HEIs can choose if they like to describe the relevance for the working life, the continued studies, or both. The requirement is more about the types of businesses where it is possible to be employed and not about the possibility of achieving an employment. If the HEI wants to describe the labour market relevance, it is up to the institution to decide how to document the need for a qualification in the labour market.

In NOKUT's regulation on accreditation there is no requirement of involving representatives from the labour market in the process of assessing learning outcomes descriptors. Most of NOKUT's external experts are academics with limited experience from the labour marked outside the academia. The learning outcomes descriptors of a study programme are developed by the HEIs and the institutions decide themselves if and how they want to involve representatives from the labour market in the development process.

Hence, the question is if the learning outcomes descriptors do communicate well enough with the labour market. In some cases the learning outcomes descriptors could be transparent for the HEI, but not clearly expressed for the labour market. This can lead to a lesser transparency between the labour market and the qualifications from the educational system. A plausible proposal is therefore to change the requirements for skills and competences in expert panels from just academic qualifications to include stakeholders with competences from the relevant subject area in the labour market.

#### 3.4 Sweden

In this section, we will focus on the implementation of learning outcomes and analyse the assessment of learning outcomes. The emphasis will be on the materials that currently are used in external quality evaluation to assess achieved learning outcomes. Lastly, we will focus on the strengths and limitations in the way learning outcomes are applied in the appraisal of entitlement to award qualifications and in external quality evaluation of programmes.

# 3.4.1 Implementation of learning outcomes

# Appraisal of entitlement to award qualifications

The main objective with the appraisal of entitlement to award qualifications is to make sure the study programmes provide the prerequisites for students to attain the learning outcomes that are part of the qualification descriptors in the Ordinance. The rationale behind the assessment process is outcome-based and has been so since 2007 when the current Qualifications Ordinance was enforced. Universities are by default entitled to award first, second and third cycle general qualifications while university colleges have

to apply for the entitlement to award qualifications in the case of second <sup>16</sup> and third cycle qualifications. For first and second cycle professional qualifications and qualifications in the fine, applied and performing arts in every cycle, both universities and university colleges have to apply for the entitlement to award qualifications.

General quality aspects for first and second cycle qualifications on which to base these appraisals are the following:

- The conditions of a study programme
  - 1. Teaching competence
  - 2. Education environment
  - 3. Infrastructure
- Design of the study programme
  - 4. The study programme specification
  - 5. Tuition, study literature and examinations
- The outcome of the study programme
  - 6. Assuring the qualification descriptors
  - 7. Assuring the quality of the study programme

The criteria for each quality aspect can vary depending on the degree. The assessment is made by a panel of experts on the basis of an application and usually also an interview. The panels assess the aspects to be either satisfactory or non-satisfactory. All criteria do not have to be satisfactory to gain the entitlement. However, there is a general requirement that the aspect teaching competence is satisfactory. The decision is made by the Swedish Higher Education Authority except for independent education providers who have to apply to the government for the entitlement to award qualifications.

The intended learning outcomes of the programme are assessed primarily in criterion 4, 5 and 6. However, they are also partly or indirectly assessed in criteria 1 and 2. For criteria 4 and 5, the emphasis of the assessment is based on an analysis of how relevant the design of the programme (tuition, literature and the examination types) is in relation to the qualification description, including the intended learning outcomes. The alignment relates to the content as well as the level of the programme. The assessment of criteria 6 analyses whether universities have systems in place that provide students with opportunities to reach intended learning outcomes.

The assessment of the teaching competence and education environment analyses how the teacher capacity and research areas that are represented at the institution cover the content of the programme. This assessment is also related to the level of the programme.

# The general role of learning outcomes in external quality evaluation of programmes

In the current evaluation system<sup>17</sup>, the programmes are evaluated in terms of how well the students achieve the requirements laid down in the Higher Education Act and the qualification descriptors in the ordinances that are linked to it.

The evaluations are undertaken by external assessment panels in which subject experts, students and practitioners are represented. For each evaluation, and in accordance with the Authority's guidelines, the panel suggests a selection of the learning outcomes listed in the Qualification Ordinance on which to base

<sup>&</sup>lt;sup>16</sup> University colleges have the entitlement to award qualification at first cycle and for one-year master's programmes.

<sup>&</sup>lt;sup>17</sup> The Swedish National Agency for Higher Education's quality evaluation system 2011–2014, Report 2012:15 R.

the subsequent assessment of the material. The panel also proposes more specific criteria for the assessment, on the basis of an interpretation of the selected learning outcomes in relation to the programme in question. These outcomes and criteria are then discussed with HEIs. The principal assessment materials consist of **independent projects** (degree projects) produced by students as well as HEIs' **self-evaluations**. The other two materials are the **alumni questionnaires** and the **students' own experiences** of their programmes through interviews. Interviews with HEIs' representatives are also held. The relative weighting is different for different programmes or subjects. The panel submits a proposed assessment of each programme using a three-level scale:

- Very high quality
- High quality
- Inadequate quality

The assessment must make it clear whether, and to what extent, the students achieve the selected outcomes and this forms the basis of the assessment of the quality of the programme in question. The panel has to provide arguments for each assessment. On the basis of this assessment the Authority then decides on the overall judgement to be awarded to each programme. Those that receive the judgement of inadequate quality will be reviewed within one year, after which the Authority will decide whether the entitlement to award a qualification is to be revoked or not. The review focuses exclusively on the learning outcomes with regard to which the students' actual achievement was deemed to be inadequate. HEIs with study programmes of very high quality will be rewarded through increased appropriations.

# 3.4.2 Analysis of assessments in relation to learning outcomes

#### The appraisal of entitlement to award qualifications

On 1 July 2011, the new professional degrees in education were enforced in Sweden. All HEIs that wanted to issue the new degrees had to re-apply for the entitlement to award qualifications. In the first round of the appraisal there were applications covering totally 495 subjects for the degrees of Master of Arts/Science in Secondary Education. Table 6 gives an overview of the assessment of the 123 (25%) applications that were not approved.

	Teaching competence	Education environ- ment	Infra- structure	The study programme specification	Tuition, study literature and examination	Assuring the qualification descriptors	Assuring the quality of study programmes
Number	110	20		46	72	11	
Proportion (%)	89	16		37	59	9	

Table 6: Number and proportion of subjects that were not approved and non-satisfactory aspects

This indicates that the decision not to approve applications is based on deficiencies in a variety of aspects. The most common aspect is teaching competence in which close to 90% of those applications that failed showed deficiencies. However, many of the failed applications had also deficiencies in the aspects related to the alignment between the intended learning outcomes of the programme and courses, i.e. aspect number 4 that stipulates learning outcomes in accordance with the system of qualifications (close to 40%), as well as aspect 5 (60%). The most common reasons for rejection relate to the structure of the programme, e.g. unclear forms of teaching and examination, as well as weak/unclear progression and lack of adequate study literature.

This indicates that without an adequate teaching resource it will be difficult for students to reach the intended learning outcomes no matter how well described they are in the curriculum. Another finding worth mentioning is that the overall assessment of the entitlements to award the degrees in science in secondary education to a very minor degree refers to the national qualification descriptors.

#### **Quality evaluation of programmes**

The main idea of the current evaluation system may seem to be quite simple. A programme is to be assessed with regard to the extent to which students in the programme achieve the learning outcomes specified in the National Qualifications Ordinance. In other words, achieved learning outcomes are to be measured against intended learning outcomes. Quality of programmes is thus implicitly defined in terms of assurance of standards.

However, methodologically it is more complicated, since it is difficult to find a simple and effective method of measuring standards of achievement with a high degree of reliability and validity. Apart from general problems concerning the interpretation, explication and application of statements of learning outcomes at the qualification level, and the possibility to determine clear-cut measures of standards, there is above all the problem of finding adequate and easily accessible material on which the assessment can be based. In practice, the available material will as a rule provide more or less indirect evidence with a more or less limited scope of validity. As mentioned in 3.4.1, four different assessment materials are used. Here, we will focus on assessment on the basis of students' independent projects and, in more detail, on assessment on the basis of higher education institutions' self-evaluation reports. Questionnaires for alumni and interviews with students have a significantly less prominent role, partly due to practical circumstances and design.

The use of **students' independent projects** as material for the assessment of the achievement of learning outcomes is based on the following circumstances: that students' independent projects are prescribed by the national qualifications framework; that higher education institutions are obliged to file them; and that students' independent projects generally ought to reflect very central aspects of higher education. Assessment of a random selection of students' independent projects (minimum 5 and maximum 24 depending on the total number of projects) is made to ascertain student attainment in relation to intended outcomes as indicated in the Qualifications Ordinance. This appraisal is not a review of individual students but a means of assessing the results of a study programme on the basis of the outcomes laid down in the relevant qualification descriptors. It is the aggregate quality of students' independent projects in relation to each of the different learning outcomes that provides the basis of the evaluation and not specific excellent or poor productions.

According to the experts, it has worked fairly well to assess the degree projects based on the outcomes in the Ordinance. Some panels have developed more close to practice criteria which then are related to the outcomes in the Ordinance, while others have used the outcomes more directly. It would be useful to do a study on which method is optimal. However, this material has not been found very useful in evaluations of some of the professional programmes since it does not cover many important learning outcomes that are part of the Ordinance. For example, in the evaluation of Master of Science in Psychology, only three of the chosen 11 learning outcomes were used to evaluate the degree projects, making the self-evaluation the principal material.

Although students' independent projects obviously make up a kind of direct result or outcome, the scope of validity of this material as an indicator of the achievement of learning outcomes on the level of degree has been discussed and debated. The validity may vary between programmes. Also, the independent project is only a small part of a programme (15 and 30 ECTS credits for first and second cycle qualifications, respectively). There is further no obligation that the learning outcomes related specifically to the independent project matches the qualification descriptors. In general, there will of course be some correlation, but it would be wrong to expect students' independent projects to reflect the learning outcomes of a qualification in a direct and comprehensive manner with regard to their full width and

depth. In some cases the independent project may even be produced several semesters before the end of the course of study leading to a qualification.

Other methodological limitations are connected to the sometimes very small samples and the circumstance that the period from which the sample is taken may vary from one to three years. The samples may be more or less representative of the output of a given programme and the aggregated assessment of a selection of projects may be more or less reliable as an indicator of the achievements of the students in general. These limitations suggest the need for a more comprehensive and systematic assessment that takes contextual factors into consideration and that is guided by an awareness of the problems related to validity and reliability. In practice, the panels tend to be rather overwhelmed by the quantitative information of the judgements given to the projects in the sample taken from a programme.

The self-evaluation<sup>18</sup> is intended to enable a more extensive and complete account of outcomes than that offered by the independent projects. In its self-evaluation, the HEI should therefore present, analyse and assess the outcomes achieved in relation to all the national learning outcomes on which the evaluation is based. This account must aim to demonstrate to the experts that the students (and therefore the course or programme) meet the targets in the qualification descriptors. Some presentation of the circumstances and processes may, however, be included to enable the institution to account for how it assures that the students achieve the targets. Though, in the guidelines it is explicitly stated that it is not the circumstances and processes as such that will be evaluated, but the educational outcomes. Each institution is free to choose the material on which to base its analysis of goal attainment. However, examples of material that can be used have been offered by the Authority and include summaries and analyses of examination tasks and questions, results of evaluations and follow-up of different kinds, for instance the results of course evaluations and programme evaluations, as well as descriptions and analyses of how several courses are based on each other so that students will attain qualitative targets or their component elements.

Assessment of achieved learning outcomes on the basis of self-evaluation reports obviously poses several challenges: it is a very indirect material, encompassing disparate data and analyses and also the very idea of reporting achieved learning outcomes in a manner that enables assessment with a high degree of equity. A more thorough discussion of these challenges, based on an in-depth study, follows below.

# In-depth study: assessment of achieved learning outcomes on the basis of self-evaluation reports

Assessment of achieved learning outcomes on the basis of self-evaluation reports has never been done before in EQA processes in Sweden and obviously faces several challenges, as stated above. There were also some preliminary indications initially that HEIs' analyses of goal attainment in the self-evaluation were weak and that this material was by and large not taken into consideration by the panels in their assessments. Against this background, an internal study was conducted at Authority with the overarching objective:

To strengthen the analysis of (achieved) goal attainment of HEIs' self-evaluations

However, in order to reach this objective it was deemed necessary to investigate the impact of self-evaluations of the outcome of the final judgements and what the assessments have been based on general and professional qualifications. Questionnaires were sent to all project managers and interviews were conducted with a selection of project managers in order to gain a better insight to some key questions.

It shows that the content and quality of the submitted self-evaluations varies a lot. With some few exceptions they lack accounts of results. Instead they include: a description of content and design of

<sup>18</sup> General Guidelines for self-evaluation in the Swedish National Agency for Higher Education's Quality Evaluation System. Report 2011:11 R.

education and how learning objectives are examined, examples of grading criteria, examples of exam answers and compilations of course evaluations. The survey also reveals that the perception of what is a good self-evaluation varies between experts. Some experts have interpreted the Authority's instructions very literally, i.e. looked for concrete results, with the implication that they found the self-evaluations useless and consequently did not use it as an assessment material. Other panels were of the opinion that the circumstances and processes described by the HEI gave a very good picture of the quality of the education and found the self-evaluation as a basis for assessment very useful.

The conclusions drawn from the analysis above are twofold. Firstly, HEIs have not managed to comply with the new guidelines regarding the self-evaluation. The reasons could either be that HEIs are stuck in the old way of writing self-evaluations or that it is not clear to them what should be included in these documents. Another reason could be that HEIs do not have the data needed for the analyses asked for. A second important finding is that the panels have worked very differently from each other. In the case of general qualifications the actual use of the self-evaluations has been very minimal. However, in the case of the professional qualifications the self-evaluations, together with the site visits, was the main material on which they based their assessments. In these cases, the panels found the following descriptions useful: alignment of intended learning objectives of courses with the qualification descriptors, content and design of tuition including information on progression, how exams assure the attainment of learning outcomes, teaching and supervisory competence, and to a limited extent, compilations of course evaluations.

Perhaps the most plausible proposal would therefore be to change the purpose of self-evaluations from being results-focused to more process-oriented. The implication would be to change guidelines and instructions to HEIs on the data the self-evaluations should contain. This approach would perhaps better fit the purpose of the forthcoming EQA system, e.g. to help HEIs to identify strengths, good practices and areas in need of development in their own operations. It would also better safeguard the important principles of equivalence and predictability.

# 3.4.3 Analysis of strengths and limitations in the way learning outcomes are applied

# The focus on learning outcomes: ideologically simple but methodologically challenging

One of the strengths of the present evaluation system is the simple philosophy behind the system and the clarity of what programmes are evaluated against, i.e. the focus on attainment of the qualification descriptors. Even though HEIs have not managed to present concrete results in the self-evaluations, the focus of the processes described is on assurance of the qualification descriptors. Another strength is that the starting point of the evaluation is the law and the Qualifications Ordinance, since they contain the only common goal descriptions that are available in Sweden and has been established by the government, giving legitimacy. However, methodologically it is more complicated since it is difficult to find methods with a high degree of validity and reliability. Also, the qualification descriptors were not really designed to be used in an evaluation of achievement of outcomes. The Authority has now gained valuable experience on the ones that are evaluable and which ones are not.

An important feature of Swedish EQA is that the objects of evaluation are identified in relation to entitlements to award qualifications in main field of study. Methodologically, this has proven difficult since it does not always correspond to the level of work at HEIs. In many instances, the focus is rather on programmes and specializations. In the case of some subjects, the majority of the students remain only for one or perhaps two semesters and have other main fields of study. In these cases it would perhaps be more relevant to focus on outcomes in earlier stages of the cycle of education in question. Further, in the case of general qualifications, the majority of the learning outcomes relate to generic skills and abilities that are not necessarily tied to the courses within a given main field of study but rather to the whole course of study leading to the qualification. In other words, the course of study within a main field of study cannot on its own be supposed to account for strengths or weaknesses with regard to all of the learning outcomes tied to a qualification.

# A focus on detail should be balanced against a focus on patterns

One weakness when looking at the two EQA approaches in Sweden as part of a whole system is that the two approaches are not complementary. In the appraisal of entitlement to award qualifications no single detail or single qualification descriptor will be decisive for the final judgement. Rather the assessment is based on a coherent whole. In addition, at least in the appraisals described in section 3.4.2, it relates very loosely to the qualification descriptors, calling perhaps for a clearer approach towards learning outcomes. On the other hand, the current evaluation model is characterised by a fragmentation that undermines the possibility of making well-balanced judgements that are informed by a more holistic understanding of the evaluated programmes and that are sensitive to their specific design and profile. In the latter, the focus on details should be balanced against a focus on patterns. This would probably also make the assessments more useful in the internal quality assurance processes. The Swedish Higher Education Authority is now in the process of developing the system for the coming cycle that is planned to be initiated in 2015. Given that the signal from the government is a renewed membership of ENQA, the Authority could argue for a better coordination and consistency between the two parts of the Swedish EQA-system.

# The assessment materials used in quality evaluations

On paper, the assessments are based on many and varied sources. However, in reality the greatest weight has been given to students' independent projects and for the general qualifications the role of the self-evaluation has been rather minimal and the other two materials, questionnaires for alumni and interviews with students, have a significantly less prominent role. As discussed in section 3.4.2, there may be limitations with regard to the validity of students' independent projects as indicators of the achievement of the qualification descriptors on the programme level, as well as the reliability of the assessments of students' independent projects. Of course, all methods have problems of this kind. The challenge is to work out a systematic way of dealing with them.

In contrast with the assessment of general qualifications, the professional qualifications have been subject to more holistic assessments with great weight given to the self-evaluations in combination with the site visits. In the latter case, the focus has been more on processes (and to some degree also conditions) that assures the attainment of the qualification descriptors.

The status of the self-evaluation reports has been unclear. In theory, they were supposed to include accounts for "results", permitting judgements with a high degree of equity. In practice, such results are rarely found and insofar the self-evaluations are used as an assessment material, the focus is rather on processes fit for purpose. Against this background, the instructions to HEIs and panels have been amended to enhance the purposefulness and usability of data. Another possibility, especially considering the next evaluation cycle, would be to change both the purpose of and the guidelines to the self-evaluations to contain information that more resembles the quality aspects that are assessed in the appraisal of entitlement to award qualifications. One of the criteria assessed in the appraisal is internal quality assurance.

A strength of the independent projects as an assessment material is that the results are available since they are prescribed by the national qualifications framework and HEIs are obliged to file them. Apart from uploading a gross list of all independent projects and then anonymise a random selection of these, it has meant relatively little work for the HEIs.

In addition, students' independent projects generally reflect rather central aspects of their education implying that the Authority get hold of some quality aspects. However, it may not be possible to express an opinion about the quality of entire programmes. The panels also found it relatively easy to assess the qualification descriptors. Last but not least, in these cases panels have chosen to work with assessment criteria, it becomes very transparent and clear how programmes have been assessed, at least for the part of the system that concerns the judgement of the independent projects.

One disadvantage is that the assessment of students' independent projects is rather costly.

The assessment within one and the same evaluation has throughout the cycle been characterised by a high degree of equivalence. However, very different assumptions have been used between the different evaluations by the panels of what is likely to mean an overall judgement of e.g. "inadequate" and also how the assessments of different materials have been weighted. The routines and guidelines have now been improved in order to ensure a greater level of equivalence also between the different evaluations. In every peer review it is important to ensure that the process is not too arbitrary.

#### The role of students and labour market representatives need to be enhanced

The subject experts have generally expressed rather positive opinions about the new evaluation system. One reason could be that their expertise is now better used than in earlier systems. However, there is still room for improvement regarding the role of the students and labour market representatives, both in terms of participation and influence in the panels, but also with regard to how their perspectives are taken into consideration in the overall assessments.

#### The system is quality enhancing

Experiences so far include that the current system is quality enhancing in the sense that it finds programmes that are of low quality. One proof of this is that HEIs withdraw programmes that receive the overall judgement 'inadequate quality'.

Another strength is that the focus on the qualification descriptors has enhanced awareness and knowledge about the national qualification framework and contributed to more systematic efforts by HEIs of looking into how well intended learning outcomes of individual courses are linked to the qualification descriptors. A possible weakness is that a focus on independent projects potentially could steer away from aspects of education that are not easily incorporated into them.

# 4 CONCLUSION

This chapter gives a summary of the current status of learning outcomes in external quality assurance processes in the Nordic countries and the strengths and limitations presented in the country chapters. This discussion can be viewed as the joint Nordic experience from working with learning outcomes in various external quality assurance approaches.

# 4.1 The current status of learning outcomes in external quality assurance approaches in the Nordic countries

# Differences and similarities in the external quality assurance approaches

A variety of external quality assurance approaches are used in the Nordic countries. The different approaches related to learning outcomes are summarised in Table 7 below.

APPROACH	DENMARK	FINLAND	NORWAY	SWEDEN
Accreditation of new programmes	X (LO in relation to NQF, programme design, teaching methods, teachers competences, facilities and labour market demand)		X (LO in relation to NQF, programme design, teaching methods, teachers competences, facilities and labour market demand)	
Accreditation of existing programmes	X (LO in relation to NQF, programme design, teaching methods, teachers competences, facilities, labour market demand, examinations and grades)			
Control of existing study programmes (Revision of accreditation)			X (LO in relation to NQF, programme design, teaching methods, teachers competences, facilities and labour market demand)	
Institutional quality audit		X (Quality management of sample degree programmes)	X (If included in the HEIs internal quality assurance system)	
Appraisal of entitlement to award qualifications				X (LO in relation to NQF, teaching competence, education environment, infrastructure, study programme specification, tuition, study literature and examination, assuring the qualification descriptors)
Quality evaluation				X (LO in relation to NQF attainment of the qualification descriptors)

Table 7 External quality assurance approaches in relation to learning outcomes in the Nordic countries

As regards the methods used by the agencies to collect data, it can be concluded that many of the same methods are used, but there are also differences between the approaches. The different data collection methods are summarised in Table 8 below.

DATA COLLECTION METHOD	DENMARK	FINLAND	NORWAY	SWEDEN
HEI self-evaluation reports	X	X	X	X
site visits (incl. interviews)	X (EVA and ACE have no site visits in ex- ante accreditations)	Х	X (audits, 3 <sup>rd</sup> cycle accreditation, audit and control activities)	
interviews			X (3 <sup>rd</sup> cycle: HEIs and students, and in audits and control activities)	X (HEIs and students)
application	X (ex-ante accreditation)		X (accreditation)	X (entitlement to award degrees)
students' independent projects				х
alumni questionnaires			X (control activities at all levels) <sup>19</sup>	Х

Table 8 External quality assurance - data collection methods in relation to learning outcomes in the Nordic countries

# Differences in how the national qualifications frameworks are implemented in the Nordic countries

A national qualifications framework (NQF) may be considered a precondition for imposing the institutions to implement learning outcomes. However, this is not always the case. Although Finland does not yet have a NQF, some HEIs in Finland have already implemented learning outcomes at their own initiative based on the proposal to a NQF. Furthermore, the national qualifications frameworks are implemented differently in the Nordic countries as presented in Table 9 below.

<sup>&</sup>lt;sup>19</sup> Control activities before 2011 included alumni questionnaires. A pilot project on control of existing study programmes for 2012-2013 is conducted without alumni questionnaires. Based on the evaluation of the pilot project, it will be decided if alumni questionnaires are included in the coming control activities.

NATIONAL QUALIFICATIONS FRAMEWORK	DENMARK	FINLAND (NQF not yet approved by the Parliament)	NORWAY	SWEDEN
Overarching framework the NQF is based on	QF-EHEA and EQF	mainly EQF	QF-EHEA and EQF	QF-EHEA <sup>20</sup>
National level	Qualification levels described as learning outcomes using knowledge, skills and competences	Qualification levels described as learning outcomes using knowledge, skills and competences	Qualification levels described as learning outcomes using knowledge, skills and general competences	Qualification levels described as learning outcomes using knowledge, skills and competences
	Degree type descriptors described as learning outcomes using knowledge, skills and competences	-	-	Qualification descriptors described as learning outcomes using knowledge, understanding, competence, skills, judgement and approach.
Institutional level	The study programme should be described as learning outcomes using knowledge, skills and competences and be specific for the programme	-	The study programme should be described as learning outcomes using knowledge, skills and general competences and be specific for the programme	The study programme should be described as learning outcomes using knowledge, skills and competences and be specific for the programme
	The modules should be described in terms of learning outcomes, but not necessary as knowledge, skills and competences	-	The modules should be described in terms of learning outcomes, using knowledge, skills and general competences	The modules should be described in terms of learning outcomes, but not necessary as knowledge, skills and competences

Table 9 Implementation of national qualifications frameworks in the Nordic countries

# 4.2 Discussion of strengths and limitations of learning outcomes

# Learning outcomes are a good tool for assessing level and cohesion of study programmes

The Nordic experiences show that learning outcomes have provided institutions, expert panels and external quality assurance agencies with a common, transparent language which has been widely used for assessing the level and the cohesion of programmes.

In accreditations and programme evaluations, learning outcomes have helped to develop clear standards for describing the level of a programme, especially when the learning outcomes are defined by or related to

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<sup>&</sup>lt;sup>20</sup> A proposal on the Swedish qualification framework has been submitted to the Government. When the Government has decided on the framework it will also be tied to the European Qualification Framework, the EQF.

a national qualifications framework. As a consequence, the agencies and the expert panels are able to compare programmes on the same level in a more structured manner because the programmes are assessed against the same standards. Previously, there were no common standards for assessing study programmes and the judgement was based on the curricula and experts' experience and knowledge.

Moreover, the learning outcomes give a holistic view on the study programme. By linking structure, academic progression and contents, the learning outcomes clarify areas of overlap between modules and make it possible for the expert panels to assess whether there is consistency across the modules in a programme. The various types of alignment analyses make it possible for the expert panels to assess the degree to which the programmes facilitate learning processes that are likely to lead the students to actually achieve the learning outcomes. In Norway and Denmark, learning outcomes take a very prominent position in the accreditation criteria. They are often used to interlink different elements regarding the quality and relevance of a programme, such as teaching resources, employability of the students, name of the programme, curricula, teachers competence, research base and academic development work, pedagogical methods, exams and testing, labour market relevance etc. As a result, it is possible for the expert panels to make a holistic assessment of the programme that does not just focus on the structure of the study programme, but on the actual delivery of the programme.

# Learning outcomes can enhance transparency and creditability of programmes

Learning outcomes can enhance transparency and comparability of qualifications for two reasons. Firstly, the transparency and comparability is enhanced because learning outcomes offer clear statements of what the student is able to achieve after studying the programme and thereby give students, stakeholders and the labour market comprehensive information about the programme. Secondly, it can be argued that the creditability of a programme increases when it has been externally quality assured by approaches that focus on output compared to external quality assurance approaches that focus on input, for example curricula.

However, it is without the scope of this project to say whether students, stakeholders and employers are actually using the available information about learning outcomes for transparency and comparability purposes and whether they experience that learning outcomes make the quality of the programmes more creditable. EVA conducts a project in 2013<sup>21</sup> that looks at the implementation of the NQF in educational institutions and how the institutions experience the use of the Danish Qualifications Framework and learning outcomes, e.g. in their dialogue with employers and other stakeholders.

#### Learning outcomes give good opportunities to assess study programmes' labour market relevance

The assessment of learning outcomes and working life relevance of study programmes are to some extent included in the external quality assurance approaches in all Nordic countries. When it comes to who conducts the assessment, there are two different approaches represented in this material: 1) the agencies use stakeholders in the work as external expert and 2) assessment of working life relevance with no stakeholder representation included. These two approaches are presumably a result of different traditions in the countries and different ways of organising the assessments in the agencies.

External experts have various tasks in the evaluation work related to learning outcomes in the Nordic countries. In Sweden representatives from the labour market always take part in the external assessment panels, as is the case with the audit teams in Finland. In Denmark representatives from the labour market always take part in the external assessments panel of existing programmes and new study programmes (but not necessary in accreditation of new local provisions of programmes). In Denmark, Finland and

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<sup>&</sup>lt;sup>21</sup> Evaluering af den danske kvalifikationsramme for livslang læring http://www.eva.dk/projekter/2013/evaluering-af-den-danske-kvalifikationsramme-for-livslang-laering

Sweden stakeholders as a rule participate in all parts of the assessment conducted by an external expert panel. Stakeholders' participation is equated with students and academic members. By choosing to include representatives from the labour market in external expert panels is a sign of the expert's important contribution in assessing labour market relevance. These experts represent the stakeholder view and in some cases they have first-hand knowledge about the skills and competences needed. Naturally, these assessments are given more confidence in the working life when they are conducted by people with competence on the labour market needs. However, the Swedish experience shows that there is still room for improvement regarding the role of the labour market representatives, both in terms of participation and influence in the panels, but also with regard to how their perspectives are taken into consideration in the overall assessments.

In Norway there are no representatives from stakeholders or the labour market in the external expert panels on accreditation of new study programmes. The tradition is to use academic experts from universities and university colleges (and Ph.D. students in accreditation of Ph.D. programmes), or other relevant persons. External experts are chosen on the basis of academic skills and competences. Knowledge about the labour market or subject-related labour market is not a requirement when experts are recruited. These experts assess whether the provision has relevance for the working life based on their knowledge and experience from their home institution or other kind of experience and information. The quality of the assessment of the criterion on relevance in the working life is very much dependent on the single expert's competence and experience. The experts background and competences to assess relevance may be random, and therefore also the result of the assessment.

Nordic experiences show that learning outcomes makes it possible for experts from the labour market to assess the programmes' relevance for the labour market in a more systematic way. Employers might not know the specific field of study and the current curricula used at the institutions, but they know about the knowledge, skills and competences that are required in the labour market. The focus on the outcomes of the programme compared to the input should thus give the labour market expert better opportunity for assessing the programme and in the same time incurring the institutions to formulate learning outcomes which are relevant for the labour market.

## The role of learning outcomes at programme level and institutional level

There are differences in how learning outcomes have been included in the external quality assurance approaches in the Nordic countries. However, as this project has shown there are also common elements between the countries. The different approaches are mainly focusing on intended learning outcomes and the description of how learning outcomes are implemented and assessed in study programmes. Achieved learning outcomes are also assessed in Sweden and Denmark; in Sweden being the main part of the assessment.

It is clear that the philosophy behind the different external quality assurance approaches has an impact on how learning outcomes are applied in the approach. Programme accreditations and quality evaluations are more focused on supervision, control and ensuring that a minimum threshold is met. These approaches allow the agencies to assess if learning outcomes descriptors are accurate and whether learning outcomes are achieved. With these approaches it is relatively easy to implement learning outcomes in external quality assurance and make learning outcomes an essential part of the judgement (for example in the Danish and Swedish approaches). However, as discussed earlier in this report, it has proven quite difficult to assess achieved learning outcomes.

Audits take an indirect approach to improving quality of higher education, aiming to support continuous development within the institutions and thus also emphasise the autonomy of the HEIs. An audit in the Norwegian approach is an evaluation of a single institution's own practice and capacity when it comes to evaluate and develop their own educational provision. The HEIs themselves develop their own internal quality assurance system relevant for the institution's activities and portfolio. NOKUT expects that the

implementation of learning outcomes in the coming years will have effects for the scope of the internal quality work, and the design of the audit procedure will take that into account.

A challenge in an institutional quality audit may be a broad focus of the audit making it harder to implement learning outcomes as a central element of the assessment. This is the case in the Finnish approach which focuses on virtually all activities of the HEI and due to this the approach is producing only limited amount of information on learning outcomes. It is likely that an audit approach with the main focus on the quality management of educational activities and not all activities of the HEI is better able to incorporate the different aspects of learning outcomes in the evaluation. Furthermore, when learning outcomes have been included in institutional activities and the institutions have enough experience of the quality management procedures related with learning outcomes, it is expected that the institutions' evaluation of their own provision are centred around learning outcomes, and will have a more central role in quality audits. Learning outcomes may also be a central element in other institutional external quality assurance processes; for example it is expected that learning outcomes will have a central role in the coming institutional accreditation system in Denmark.

# The risk of generic learning outcomes descriptors

The national qualifications frameworks describe the expected learning outcomes for a given qualification. The descriptions of the learning outcomes are based on keywords and a precise terminology. In trying to live up to the national descriptors there is a potential risk that the institutions will compose learning outcomes descriptors that are to a higher or lower extent copies of the national descriptors elaborated with some keywords from the subject area. When it comes to new programmes there have been a slight tendency towards this in Denmark and Sweden. In Norway, NOKUT has given administrative decision of rejection to a high number of institutions and some of these are due to the fact that the HEIs also copied the national generic learning outcomes descriptors in study programmes.

When the institutions copy the national descriptors as learning outcomes for a study programme there is a risk that the assessment is then less focused on the learning outcomes of the study programme. If the purpose is to assess the content and not only the outcome, then the focus of the assessment is moved to a consideration of how the courses are related to the national descriptors of the level. In most cases, the learning outcome descriptions for courses fit under the generic learning outcomes descriptors for the study. In addition, there is a risk that the study programmes could be standardised and that the purposes of the learning outcomes are solely to function as documentation for the external qualification process rather than as a didactical and pedagogical tool for the institution. Furthermore, the intention of the learning outcomes descriptors is to create transparency between the society and the educational system as well as function as a tool for promotion of cross-border mobility and understanding of the education systems. If the learning outcomes descriptors are too similar they will not fulfil these intentions.

# Formalistic aspects of learning outcomes versus actual content of education

To use the framework of learning outcomes and of alignment in relation to learning outcomes is of course merely one of many possible ways of approaching central questions concerning the content, design and progression of education. It may be a very useful tool, but our concern is that it is turned into a rather formalistic exercise, without any substantial relation to the actual content and quality of education cannot be excluded.

If an external quality assurance approach focus on the framework of learning outcomes rather than on the processes that the framework is supposed to clarify and support and the criteria used concern form rather than content, then the approach has in effect more the character of an evaluation of the implementation of the framework than of an evaluation of the quality of education.

The implementation of a specific framework, like a more or less fully-fledged framework of learning outcomes, may of course be part of the governing policy within the area. However, one should perhaps

ascertain the implementation of this framework, and not only on a superficial level, before one starts to use it as an integrated aspect of quality assurance.

As long as the learning outcomes approach is not firmly rooted and integrated in the practice of education, an external quality assurance approach that focuses on learning outcomes may thus simply miss its mark. Programmes may be deemed inadequate although they in fact are very well constructed and implemented, but articulated in terms of some other and perhaps less elaborate framework. Conversely, institutions may adapt to the framework on a superficial level, providing immaculate and convincing descriptions of programmes in terms of learning outcomes and alignment in relation to learning outcomes, while the actual practice may in fact be inadequate.

To conclude, one should avoid giving too much weight to formalistic aspects of learning outcomes and rather focus on the actual content of education and balance the focus on details against a focus on patterns. Moreover, a fair and adequate assessment of the quality of education may perhaps demand a less restricted framework which tolerates different approaches to the content, design and progression of education.

#### The challenges in assessing actually achieved learning outcomes

In this project two different approaches to evaluate actually achieved results are presented. In the Danish system, external examiners take part in HEIs' normal assessment of students' achieved learning outcomes in a minimum 1/3 of the ECTS-points, including the final thesis. By this mean, it is stated that the professional and academic integrity of an examination is secured as well as the legal rights of the students, i.e. in other words it constitutes a mechanism of self-control for HEIs. In Sweden, the evaluation of the independent projects is part of the external quality assurance system as a basis for an assessment of how well the students achieve the national qualification descriptors. Here, the purpose is mainly to assure that all programmes are of high quality but also to identify those programmes that are of very high quality. Only those theses that have been approved by the HEIs are included. Thus, the rationale behind the evaluation of actual achieved results varies.

Another difference is that in Denmark HEIs are requested to explain a particularly poor result of the independent projects, for example that the students' entry grades were lower than the average for the programme nationwide. In Sweden the HEIs are given the possibility in the self-evaluation to report and analyse relevant data on students' potential and argue how this may have affected the training results. However, few HEIs have used this possibility. One question that still remains unanswered is whether it is possible to take the step from standards of student achievement to quality of education when "output" is not systematically related to the "input".

In the Swedish example, great weight has been given to students' independent projects in the overall assessment, while in Denmark the self-evaluation plays a major role and the grades only constitute a small part of the entire self-evaluation. The experiences in Sweden indicate some limitations with regard to the validity of this assessment material alone as a measure of quality of education. It also shows that HEIs have faced difficulties with including accounts for "results" in the self-evaluation, which has led to changed instructions in order to improve the purposefulness and use of the data. Despite all these methodological challenges, the perception so far in Sweden is that the current evaluation system is quality enhancing in the sense that it finds programmes that are of low quality and that the focus on the qualification descriptors has enhanced awareness and knowledge about the NQF.

#### The data collected by the agencies to assess learning outcomes

A lot of data is collected by the Nordic agencies in relation to their quality assurance approaches. The level of detail of the data seems to vary according to the focus of the approach and how structured it is in terms of regulations and guidelines. The programme accreditations and quality evaluations are focusing on a detailed level of description of e.g. the intended learning outcomes, content or design of the programme, while audits usually focus on the systematic quality enhancement work in the HEIs and take a broader

perspective. The differences in the level of detail seem to also have an impact on the end-product of the assessment. For example, the Finnish audit model with its focus on practically all HEI activities and generally stated audit criteria bring about a variation in the content of the audit teams' evaluations and reports.

The usability of the data collected is another issue that has been discussed in this project. It appears that at least in some cases not all of the data collected has been used in the assessment. This was for instance the case with self-evaluations conducted as part of the quality evaluations in Sweden where some of the HEIs self-evaluations were found of no use by the expert panels and therefore not used in their assessment. The sheer volume of data received by agencies may also be a reason for experts not including all data in the assessment simply because it is not considered necessary. In Denmark, many institutions submit an excessive amount of data as part of the accreditation process because they do not want to risk not submitting something that could have improved their assessment. However, based on EVA's experience, the amount of data is not necessarily a problem for either the experts or the institutions if it is well structured. In Norway, all attachments to the application are listed and specified in the guidelines on the accreditation procedure. If an application includes other or more attachments than listed, the applicant is asked to send a new application including only the listed attachments. This is done to prevent an excessive production of data and encourage HEIs to use information from data sources already well known.

The agencies should regularly assess that the data they are collecting is fit for purpose and that it is used in the assessment of learning outcomes, as well as to make sure that the data collected is not causing too much of an administrative burden on the institutions. All agencies have guidelines for institutions regarding the materials requested as part of the assessment e.g. the length and content of self-evaluations and different measures have been taken to improve e.g. the purposefulness and usability of the data. For example, based on the reported findings that self-evaluations were of very little use for the expert panels, the guidelines to HEIs and expert panels have now been revised in Sweden.

# 4.3 Final reflections

On the basis of the discussion of strengths and limitations, it can be concluded that learning outcomes are a good starting point for assessing the quality of study programmes. They are a useful tool for assessing study programmes' level and cohesion, enhance transparency and make it possible to assess the study programmes' relevance for the labour market in a more systematic way. However, the report has also shown the difficulties in assessing learning outcomes. The analysis conducted for this project emphasised the importance of making a holistic assessment of the intended learning outcomes to avoid making the assessment a formalistic exercise and that the assessment of achieved learning should balance the focus of outcome and processes, take into account the students' competences and entry grades.

Clearly, there is also variation in how learning outcomes have been implemented in the external quality assurance approaches in the Nordic countries, as have been discussed throughout this report. In Sweden learning outcomes are a key element in the assessment based on the students' independent projects; showing a strong focus on output and leaving aside the input, for example student, resources, and processes. On the other end of the spectrum is Finland where learning outcomes play a minor role in the quality audits.

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