

Level 5

Associate degree

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Landelijk Platform Associate degrees, Netherlands Association of Universities of Applied Sciences

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1. Introduction

The Associate degree (Ad) has rapidly secured a permanent status in our education system. When the 'Associate degree programme implementation' legislative amendment came into effect on 1 January 2018, the Ad programme became a programme in its own right within higher education. Prospective students, both those who are employed and those with a secondary school diploma or diploma on level 4 within vocational educational and training (VET), can now decide to follow either a 2-year or a 4-year programme within higher education.

In 2006, when the first pilots were launched, the Ad was still linked to the bachelor programme. These pilot courses were successful. The Ad lowered the threshold for VET-4 graduates to study at the university of applied sciences. Part-time Ad programmes were a beneficial option for the employed students wanting to up-skill or re-educate. So it was only fitting to conclude that the pilots were a success, with the result that the Ad is now a programme in its own right within higher professional education, just like the bachelor programme.

The purpose of this report is to provide a nationwide clear description of the Ad level 5. Widely used level descriptions, such as the Dublin Descriptors for Short Cycle programmes or the European Qualification Framework (EQF), are rather abstract. Furthermore, although the link to actual practice is crucial for the Ad it is not as explicit as one would wish. By answering this question, this report aims to provide a specific, domain transcending and practice-oriented description of the Ad level.

The further details about level 5 contained in this report will strengthen the Ad profile and help to kick off the discussion regarding what exactly an Ad position stands for. A universal definition of the exit level will also safeguard the quality of the underlying curricula. It provides a framework for formulating the domain-specific exit level in the final phase and thus sets the standard for the students, the lecturers and the professional field.

The description of level 5 as presented here, is based on an analysis of the European Qualification Framework, the Dutch Qualification Framework and the Dublin Descriptors. The description was subsequently validated in a national study group. The platform aims to test this description extensively among its members during the coming year. Also this coming year, this description will be presented for validation purposes to the various partners in the professional field, students and government bodies. After this validation year the description will be confirmed as being final.

The report is written in such a way that the Ad programmes can use the level description in their communication with current and prospective students (both employed people and students), lecturers, HRM professionals, company supervisors, panel members, educationalists, examination committees, curriculum committees, programme committees, managers, parents, public servants, politicians and inspectors. The description can be presented in various new forms for the purpose of opening up the discussion as to what the Ad encompasses and what can be expected of a graduate Ad student in practice.

This level description can be used in instances of applications for new associate degree programmes, for informing students, for coaches and assessors in the programmes, for national consultations of various programmes as a basis after which the programme can add its own context, for drawing up new and updated descriptions in job structure models and for accreditations and testing of new programmes.

Many more uses can doubtless be mentioned and that is why the reader should feel free to print out, distribute and use this document, spill coffee over it, dog-ear it, reread it and discuss it until the level 5 has become widely accepted.

2. The Ad student, a profile

Before describing the level description of an associate degree graduate in terms of learning outcomes, we will first typify the Ad graduate by means of a profile¹. An image often says more than meticulously detailed indicators. A profile instantly conveys the essence and once elaborated in indicators, helps to make this image more specific. The following outline gives an image of the graduate Ad student.

An Associate degree graduate
is well-grounded in the field,
keeps an overview of the situation,
connects people and means,
thereby linking thoughts and actions.

This characterisation of the Ad student harks back to the proverbial head, heart and hands, which has been translated above into being well grounded, keeping an overview and connecting. It is a widely used metaphor for emphasising that integrating actions, thoughts and connecting people produces more than only acting, only thinking or only connecting.

Ad graduates know the rules and the procedures that apply in their 'action' role. When the environment changes and the question or the problem becomes more ambiguous, Ad graduates can make flexible use of these rules and procedures to meet that change. They are therefore able to cope with non-routine problems.

Level 5 is a **level** whose strength is to be the **linking pin**. Positions at level 5 function as the link between levels 4 and 6. A description of level 4 is that of a student who has an VET-4 diploma and is trained for a specific, operational-level job. Conversely, level 6 concerns a bachelor graduate who thinks and acts more at a strategic level. The vision and the direction of the organisation is determined at a strategic level. Action on this vision is taken at an operational level. Level 5 Ad graduates can translate this vision into action. Ad graduates are familiar with the operational duties and can make the connection to the strategic level, thus linking thoughts and actions. In certain fields, the terms operational, tactical and strategic do not equate exactly to the profession. In those cases it is best to refer to planning at a vision level, decision-making at a policy level and acting at an operational level.

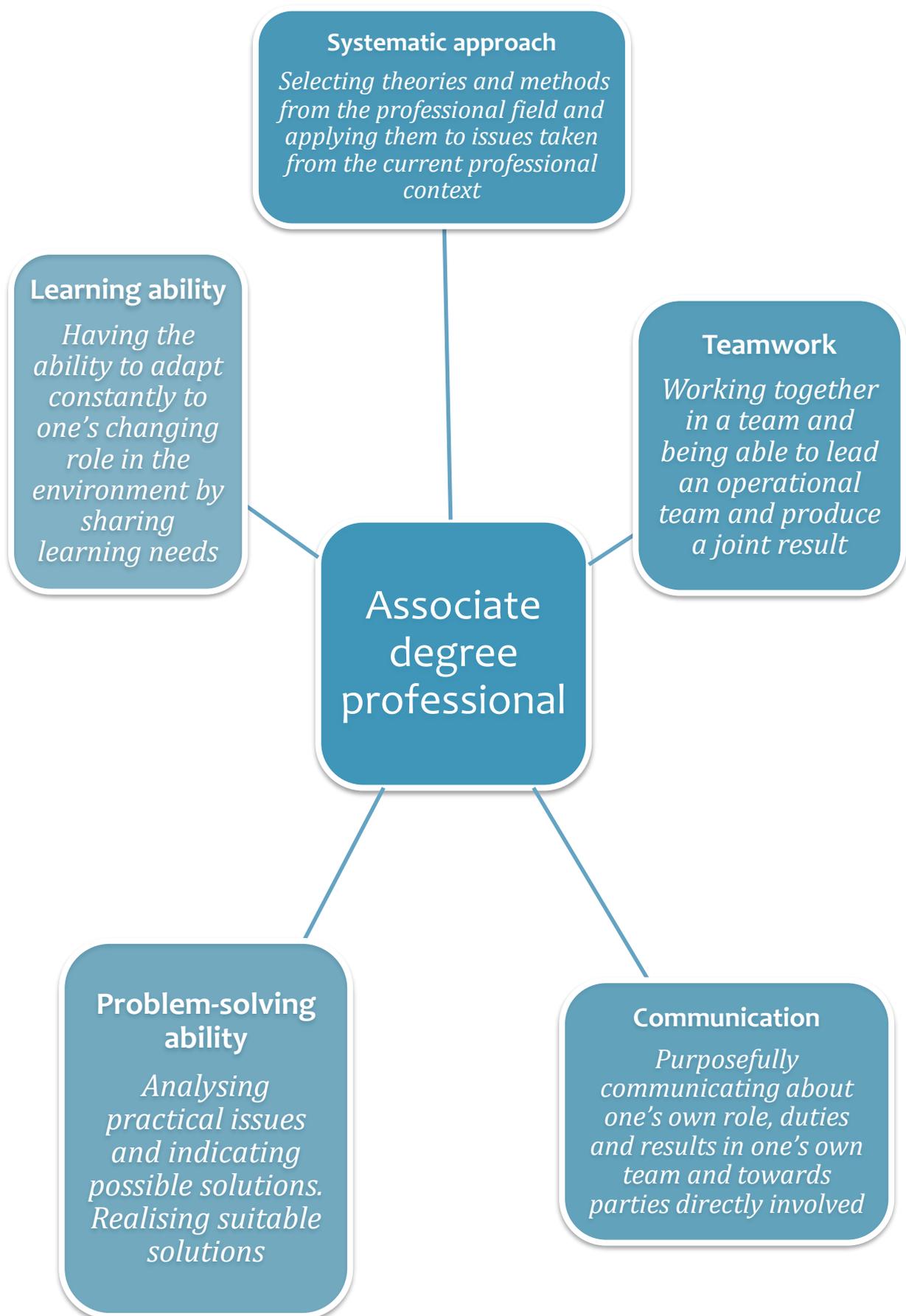
¹ This profile has been taken from the document entitled "Associate degree level description" published by the Ad national network in 2013.

3. The description of the Ad level

The description of level 5 was developed by a study group that was established through the Ad consultation platform of the Netherlands Association of Universities of Applied Sciences. This national study group analysed the existing frameworks and integrated experiences with descriptions of the level 5 already in use in the Ad programmes into the description of the Ad level. The description contains five learning outcomes, *systematic approach, teamwork, communication, problem-solving ability and learning ability*. Each learning outcome has been detailed in a description that reflects the level of the graduate Ad student.

Every programme can turn this into a concrete and more specific level description by adding their own context and body of knowledge and skills (BoKS). This description can also be traced back to the European Dublin Descriptors for Short Cycle programmes and the description of level 5 in the European Qualification Framework (EQF). The detailed justification is included in the last chapter of this report.

Following the EQF that is intentionally presented in a fan graph and not in a linear line, we have decided to present the five learning outcomes in conjunction with each other. The learning outcomes are integral and cannot be separated. Systematic approach, for instance, goes hand in hand with problem-solving ability, nor is learning ability unrelated to all other activities.



Systematic approach

The first learning outcome is a systematic approach. *“Selecting theories and methods from the professional field and applying them to issues taken from the current professional context.”* Students learn various theories and methods during the programme. The **link** to current **professional practice** is what the Ad stands for. That is why the acquired theories and methods are not learned stand alone but students must be able to apply them to a specific problem. The problem that Ad students tackle, is a practical problem for the Ad-level professions. Ad graduates can **link** various presented **theories** and methods in order to solve an issue for which there is no standard solution.

Teamwork

The second learning outcome is teamwork. *“Working together in a team and being able to lead an operational team and produce a joint result.”* The manner in which Ad graduates deal with people in their daily working environment is described here. During the course, students learn to deal with various roles and amounts of responsibility. Considering Ad graduates are **linking pins**, working together with others is an important aspect in their jobs. Whether graduates are to a larger or lesser extent involved in managing a team, depends on their specific profession. The purpose of teamwork is to produce a joint result that individuals would not be able to produce on their own. Teamwork is of added value to the result of the collective experience and expertise.

Communication

The third learning outcome is communication. *“Purposefully communicating about one’s own role, duties and results in one’s own team and towards parties directly involved.”* Purposeful here means that the Ad graduates use communication to **link** policy and realisation. Ad graduates are aware of the message, their own role and that of the recipient. Ad graduates are expected to be able to reflect on the effect of the communication on their own role, the role of the team and that of parties directly involved. Ad graduates can then translate the conclusions of their reflection into follow-up actions with regard to the role, task and results towards which they work in conjunction with others.

Problem-solving ability

The fourth learning outcome is problem-solving ability. *“Analysing practical issues and indicating possible solutions. Realising suitable solutions.”* The issue and the solution are pivotal here. Ad graduates analyse the issue, view matters critically and postpone their judgement until all required information has been collected. Ad graduates ask the right questions that are needed to analyse the problem, because they view things from a **linking** perspective. From this question, Ad graduates can formulate and substantiate suitable possible solutions. Ad graduates realise the final solution that fits within the context, the strategy and the organisation.

Learning ability

The fifth learning outcome is the learning ability. *“Having the ability to adapt constantly to one’s changing role in the environment by sharing learning needs.”* Learning does not stop once the diploma has been received. To Ad graduates, learning and working are **interwoven**. By constantly reflecting on their own actions and their role in the professional context, Ad graduates remain flexible. This happens when the Ad graduates set learning needs and share them with others in the workplace, so as to solve these learning needs together. Learning ability increases the sustainable employability of an Ad graduate. It is a natural part of an Ad graduate’s repertoire.

A principle to differentiate

A way to articulate level 5, is to look for the principle that differentiates between levels 4 and 6. This principle is the criterion that distinguishes between each level, it marks the change in wording in relation to the other levels.

For instance, when a plan of action is assessed as part of a project, the student gets a poor mark for that plan of action *if it is not underpinned*. The student gets a pass *if the plan is underpinned and can be justified* and the student gets a good mark and therefore a high grade if the plan is *underpinned using reliable sources*. The principle that differentiates between these marks is in this case is *“degree of underpinning”*.

These principles are used in marking assessments as can also be applied in defining level 5 or 6 on programme level. Principles that are widely used to differentiate are *“autonomy”* and *“complexity”*. Autonomy stresses the extent of autonomy that is expected of the student. Complexity varies in different environments and differs within every assignment. Apart from autonomy and complexity other principles to differentiate can be used, such as scope, transfer, ambiguity of the problem and assignment and the reach of the proposed solution.

The different principles that can be used per defined learning outcome are specified for level 5 in the following paragraphs. Programmes can use these principles to elaborate the learning outcomes in more detail to make them suitable for their specific professional learning outcomes.

Systematic approach

The number of theories and methods that students have learned during a course is a selection from the available knowledge basis of the specific programme. Students are expected to have knowledge of and are able to demonstrate the theories and methods within their professional context. The level is determined by the degree of competence students show and their reflection on their choices and actions. Students are expected to be able to justify these choices and underpin them systematically.

Teamwork

The size of the team, the degree of autonomy that an Ad graduate has and the degree of responsibility that an Ad graduate has in the team, determine the level for this learning outcome. In addition, the level can also be determined by the joint result that is expected of the team. The dependency of third parties, the influence of interested parties and the time pressure are principles that can be used to differentiate as well.

Communication

The level of the communication learning outcomes is determined by the scope, the complexity of the message and the transfer of the communication. Ad graduates will in most instances communicate at a tactical level. The scope is towards the first circle of relevant actors outside the team and is not limited to one's own team and the individual tasks, but has a wider scope. Who those actors are, depends on the profession.

Problem-solving ability

The level of problem-solving ability is determined by the complexity of the problem and what the solution aims to achieve. This is expressed in the responsibility that an Ad student bears in relation to the practical issue and the expected amount of autonomy. The ambiguity of the issue and the number of interested parties involved also determine the level, as well as the scope of the possible solution and the extent to which the environment changes due to the implementation of the proposed solution.

Learning ability

The level within this learning outcome is determined by the level of autonomy with which Ad graduates can formulate their own learning needs. With respect to lifelong learning, this is a characteristic that determines the extent to which graduates can continue to grow and develop in their own role in their job. It concerns the development within the job, in view of the adaptive ability and flexibility for being able to

deal with changes. Ad graduates not only formulate their learning need, but can also make that learning need known by sharing it with others and acting upon it. This is a step that shows that an Ad graduate takes steps to learn. Being aware of one's own conduct within the job is the first requirement that is taught during the programme.

Each programme within the Associate degrees has its own body of knowledge and skills (BoKS). Some programmes are more knowledge intensive than others. Also, some programmes are more skills intensive and interaction between people is more pivotal. Programmes can augment the learning outcomes that indicate level 5 by means of their own BoKS. These make the description more concrete and more specific to the profession, which increases the recognisability among students, lecturers and partners in the professional field.

The justification of the level description in this report is provided in the next chapter. The various frameworks were analysed as to the principles in each description. The principles are derived from the definitions and the changes in wording between the levels from the different frameworks.

4. The justification

The Ad in the Dutch context is a higher professional education programme provided at university of applied sciences level and has different learning outcomes than the bachelor within the same university of applied sciences. To describe the generic learning outcomes of the Associate degree, the level descriptions used within programmes, nationally and internationally, have been mapped.

Eight levels have been determined at a European level for classifying each educational system. The VET-3 education stands for level 3, the VET-4 education stands for level 4, the university master programmes stand for level 7 and the university and higher professional education bachelor programmes stand for level 6. Up until 2006, level 5 still did not have a permanent place in higher education in the Netherlands. The Ad programme changed that, first with pilots and, upon proven success, as a two-year higher professional education programme in its own right.

Various frameworks have been inventoried and compared with each other. These frameworks include the Dublin Descriptors for Short Cycle Higher Education², the European Qualifications Framework (EQF) and its Dutch equivalent (NLQF)³, elaborations of the VET-4 exit level formulated in qualification records, the Accreditation Organisation of the Netherlands and Flanders (NVAO) accreditation framework, the ZelCom model (complexity-autonomy model) of Saxion University of Applied Sciences, and other level descriptions taken from profiles and professional education segment descriptions, the Rotterdam Academy's⁴ "Ad in Perspective" and the Associate Degree Exit Level report drawn up by the national Ad network⁵.

The following sections provide a brief explanation of some of these frameworks, followed by a substantiation of choices made with regard to using frameworks for the exit level as described previously.

Dublin Descriptors for Short Cycle programmes

At the beginning of this century, 47 European countries decided to implement the European Qualifications Framework for Higher Education. This occurred within the scope of the Bologna Process. The Dublin Descriptors are described in this framework. These descriptors are used to determine the exit level of the various Higher Education programmes. The *Dublin Descriptors for Short Cycle programmes*⁶ are used for the Associate degree. These are shown in the table below. The appendix contains the comparison with the Dublin Descriptors for the bachelor's and master's degrees.

² <https://www.nvaio.net/system/files/pdf/Dublin%20Descriptoren.pdf>

³ NLQF-EQF Advisory Committee (2011) Introduction of the Dutch Qualification Framework NLQF in national and European perspective.

⁴ Ad in Perspective, Rotterdam Academy, Rotterdam University of Applied Sciences, 2013.

⁵ Associate Degree Level, national Ad network, LEIDO, 2013.

⁶ Short but Sweet? report, exploration and implementation of short higher professional education programmes, drawn up by CINOP, in collaboration with smets+ hover+ adviseurs of the Dutch Ministry of Education, Culture and Science.

Dublin Descriptors Short Cycle	
Knowledge and understanding	have demonstrated knowledge and understanding in a field of study that builds upon general secondary education and is typically at a level supported by advanced textbooks; such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle;
Applying knowledge and understanding	can apply their knowledge and understanding in occupational contexts;
Making judgements	have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems
Communication skills	can communicate about their understanding, skills and activities, with peers, supervisors and clients;
Learning skills	have the learning skills to undertake further studies with some autonomy.

European Qualifications Framework & NLQF

There are various educational systems in Europe, which makes it difficult to compare them to each other. To enable an international comparison, the European Qualifications Framework (EQF) was formulated in 2008, in which learning outcomes are described by level. The EQF covers the entire educational system and consists of 8 levels.

Each country has implemented its own version of the EQF; the Dutch version is the NLQF. The NLQF describes the learning outcomes in terms of knowledge, skills, autonomy and responsibility, all within a fixed context⁷. The NLQF positions the Associate degree at level 5. The fan below clusters the various Dutch educational types around the NLQF and the EQF.

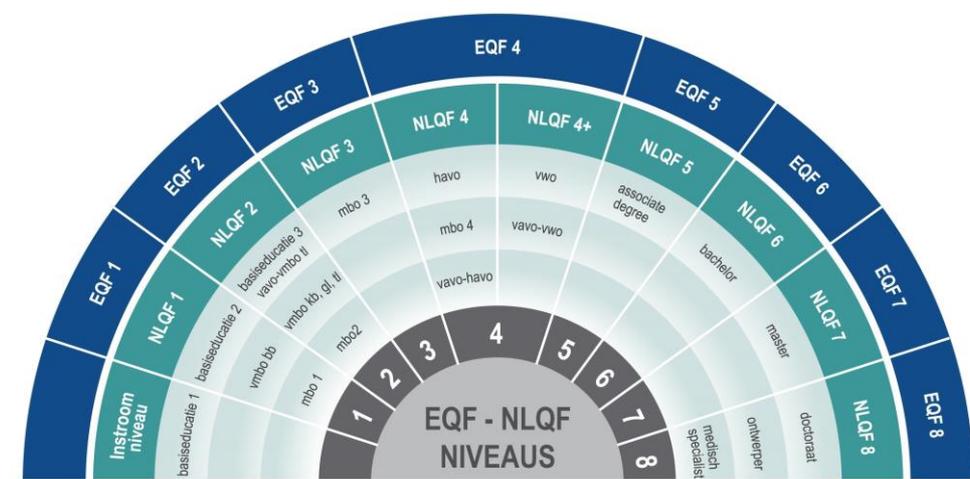


Figure 1 The NLQF in relation to the EQF and the educational system

The NLQF uses the following learning outcomes: *context, knowledge, skills, responsibility and autonomy*. The skills learning outcome has been subdivided a second time into application of knowledge, problem-solving skills, learning and development skills, information skills and communication skills.

⁷ Cedefop (2018). Analysis and overview of NQF level descriptors in European countries. Luxembourg: Publications Office. Cedefop research paper; No 66. <http://data.europa.eu/doi/10.2801/566217>

The NLQF, level 5		
Context	An unknown but changeable living or working environment, and in an international environment	
Knowledge	possess broad, specialised and in-depth knowledge of an occupation or a knowledge domain possess detailed knowledge of some professions or knowledge domains and an understanding of a selected range of basic theories, principles and concepts possess limited knowledge and understanding of some important current topics/issues and specialties related to the occupation or knowledge domain	
Skills	Applying knowledge	reproduce, analyse and apply the knowledge in a range of contexts to solve problems related to the occupation or knowledge domain use procedures in a flexible and inventive way recognise the limitations of existing knowledge in professional practice or the knowledge domain and take action to address this analyse and carry out complex (professional) tasks
	Problem-solving skills	identify, analyse and solve complex problems in professional practice or in the knowledge domain in a creative way by selecting and using relevant data
	Learning and development skills	undertake personal development by reflecting on and evaluating personal (learning) results
	Information skills	obtain, process, combine and analyse broad, in-depth and detailed information on a limited range of basic theories, principles and concepts of, and related to, the occupation or knowledge domain, as well as limited information on some important current subjects and specialties related to the occupation or knowledge domain, and present this information
	Communication skills	communicate in a targeted way with peers, supervisors and clients, appropriately to the context, using conventions which are relevant to professional practice
Responsibility and independence	work with peers, supervisors and clients take responsibility for the results of own activities, work or study, take shared responsibility for the results of activities and work of others and the management of processes	

Considering that the assignment to define the Dublin Descriptors as well as the descriptors for the EQF and the NLQF was given in a broader context than specifically defining only level 5, the phrasing of each level is more abstract and broader defined than the description as formulated in this report. The learning outcomes used in the EQF, such as knowledge, skill and learning ability, can therefore encompass the entire education system in Europe, from primary school to doctoral student. When we take a closer look at level 5 and the Associate degree within Higher Education a different classification and nomenclature was chosen based on these learning outcomes within this specific context.

The EQF, the NLQF and the Dublin Descriptors all cite “knowledge and the ability to apply knowledge in a relevant professional situation”. A student encounters a problem or an issue in practice and formulates a question. The student wants to solve that question; this is the **systematic approach** used in this report. The Dublin Descriptors refer to this as “making judgements” and EQF calls it “problem solving”.

Students are trained to work professionally in an organisation in accordance with the standards that apply in that context. Besides students having relevant and up-to-date knowledge that they can apply while doing their job, communication is the means for being able to apply that knowledge in an organisation. Students have dealings with colleagues and customers within and outside the organisation. Those students must, in other words, relate to their environment, and **communication** is the means to do

so. As regards the learning outcome “**learning ability**”, this is both found in the Dublin Descriptors as well as within the NLQF. The Dublin Descriptors Short Cycle describes the learning ability in a separate learning outcome, whilst the NLQF lists them under the skills as learning and development skills.

Ad in perspective

In 2013, the national Ad network drew up a level description in which several frameworks were compared to each other. Based on this level description, Rotterdam Academy, part of the Rotterdam University of Applied Sciences, drew up a comparison between levels 4 and 6 for its own student population, staff, professional partners, and intermediate and higher professional education partners. This comparison is called “the Ad in perspective” and reflects how the Ad can be positioned in relation to level 4 and level 6. Making a comparison provides an insight into the levels and at the same time does not encompass all nuances⁸ of the underlying professional training programmes.

This comparison has been used by several universities of applied sciences in the application process for applying for new associate degree programmes. Lecturers and students use the Ad in perspective as a tool to specify level 5 and explain it to others. Furthermore, in recent years it has contributed to the internal and external debate about the position of level 5 in Higher Education. It provides an overview because it has been positioned between level 4 and level 6. This immediately clarifies what the difference in level is based on. The Ad in perspective is reflected in the figure below.

Ad in perspective

	Associate Degree	Bachelor
Secondary vocational "knows his business"	"links craftsmanship to operations and strategy"	"is a craftsman in a wider context"
	+	+
<i>The starting professional</i> who works according to standard procedures and methods and <i>applies</i> them in daily work	<i>The starting professional</i> who applies the theories of his discipline to a <i>practical</i> problem	<i>The starting professional</i> who works <i>systematically</i> and can translate theories to <i>applications</i> for practical problems
who works practically <i>independently</i> on standard tasks and collaborates within his own team	who, while being counselled, works on <i>complex</i> tasks and <i>manages</i> an operational team	who practically independently works on complex tasks and collaborates in an environment with several <i>parties</i> and <i>interests</i>
who <i>communicates</i> about his own tasks in the team	who communicates <i>purposefully</i> about tasks in the team in relation to goals of the organisation	who communicates with <i>multiple</i> parties and <i>understands</i> the different interests
who <i>signals</i> problems	who <i>formulates</i> the (research) question	who <i>researches</i> the question
who <i>applies</i> solutions handed to him	who <i>implements</i> the solution	who formulates the <i>solution strategy</i>
who can formulate, <i>while being counselled</i> , his own learning requirements	who can formulate his learning requirements <i>independently</i>	who <i>directs</i> his own learning requirements

⁸ By way of comparison, the qualification document of the “sustainable living environment advisor” states that the advisor “translates the environment into a project or activities and is creative and demonstrates the ability to differentiate. The advisor is adept at planning and organising, has the ability to solve problems, and is creative and flexible in solving problems.”

Analysis

In the Dublin Descriptors and the NLQF, the increase in the degree of autonomy and complexity can be traced back to the descriptions. A model⁹ has been developed within the Saxion University of Applied Sciences that reflects the degree to which the autonomy and complexity increase. The level of the Associate degree is a combination of the degree of a student's autonomy in a practical assignment and the practical assignment's degree of complexity. Various combinations can occur:

- Average degree of complexity and autonomy.
- High degree of complexity and the student is supervised step by step with a low degree of autonomy.
- The student is given a great deal of responsibility and works independently in a relatively straightforward environment.

In addition to autonomy and complexity, which are criteria that many institutions use, the "Ruggengraat" (Backbone) project¹⁰ of the professional education segment for agricultural education (Agricultural Professional Education Segment) includes two other context criteria, namely: "*scope*" and "*transfer*". The NLQF and Dublin Descriptors for Short Cycle programmes state that level 5 is the level at which the students have dealings with actors outside the organisation and with whom they communicate efficiently. As to transfer and scope, this means that the students bring a certain scope into play when completing their studies and achieve a form of transfer at a tactical level and within their own context.

The afore-mentioned principles to differentiate between levels are incorporated into the NLQF and the Dublin Descriptors. A number of examples are provided below. In the NLQF, "autonomy and responsibility", for instance, are considered a learning outcome. For "applying knowledge" the principle *transfer* is used as in "applying other contexts" and "makes flexible and inventive use of procedures". For "communication skills" the Dublin Descriptors as well as the NLQF use the scope as a principle to indicate the skills level. This can be traced back to "communicates with peers, managers and clients". For "making judgements" the complexity is specified as in the following description: "clearly defined, concrete and abstract problems".

The conclusion is that the Dublin Descriptors and the descriptors of the EQF and the NLQF have been written to specify several levels across Europe. This means that these descriptors must be able to describe a very wide spectrum of variants, the consequence being that the descriptors are abstract and formulated in general terms. The learning outcomes and the principles have also been used in various ways and are interchangeable. The level description of the national Ad network and the Ad in perspective comparison provide more handles for describing specific level 5 in the higher educational area.

In this report, level 5 is described specifically with 5 learning outcomes and corresponding descriptions. Only level 5 in higher education in the Netherlands is described and defined. This report focuses merely on level 5. The goal of the report is to emphasize on what differentiates level 5 from other levels in the system. That's the reason why it is formulated more specifically because the wording used is focused on the context of higher professional education and in particular on the Associate degree. This raises the recognizability and practical use of the described learning outcomes.

⁹ Saxion University of Applied Sciences, Department of Educational Development & Quality Care, Education & Student Department Manual for higher professional education level, manual for researching, realising and justifying the higher professional education level.

¹⁰MBO 2010. Advancement and understanding each other, a contrastive analysis of the "competency languages" in professional education.

5. The need for a description

Upon graduation, students receive a legal certificate stating “Associate degree”, abbreviated to Ad. This degree signifies a specific level of education, both in a national and in an international context. This provides proof of having achieved a higher professional education thinking and working level, making it much easier for graduates to apply for a job. A clear description of level 5 gives the professional field handles when formulating job structure models. The programmes need a description so as to properly safeguard their quality. The level description enables bodies that measure this quality to rank the programmes more accurately.

The professional field

The professional field advises the programmes on the profile and the “blueprint” of this level which in turn translates into the curriculum. By doing so, the professional field also advises on the required minimum level that Ad students must meet in order to function in the professional area. This relates to the degree of autonomy, ability to think critically, the degree of complexity that a graduate must be able to handle and the responsibility that a graduate bears in the job. It is important that the Associate degree level is included in the job structure model of the various branches. This way, the Associate degree will become more widely known and will become a level that is rewarded according to higher professional education standards.

Standards that are met

The government has also set standards that the higher professional education level is required to meet. A certificate or diploma attests to something; it stands for a level that a graduate has achieved. It is up to the universities of applied sciences to safeguard that level. The level for higher education is set down in the Dublin Descriptors (DD) for Short Cycle Education, Higher Education, Bachelor, Master, and Doctorate programmes. These descriptors are used by many bachelor programmes to specify the higher professional education level. The Dublin Descriptors for Short Cycle programmes have been drawn up for the Ad programmes. These descriptors have been described in abstract terms. With the level description contained in this report we aim to present a more concrete description. This description can be used for applications and accreditations of associate degree programmes.

Grading students

Besides the requirement as set by the professional field and the government, it is necessary for the team of lecturers in the Ad programme to work with level 5. A team of lecturers can use the description to assess their students at the appropriate level. The better this level is described, the easier it is to judge a student’s performance. Using a common language for level 5 helps to acquire clarity for the grading of students. Clarity among the assessors regarding the interpretation of level 5 descriptors increases the reliability of the assessment. The description of level 5 helps to safeguard the quality.

The value of the diploma

A clearly stated level description contributes to the value of a diploma. After all, students receive that diploma only when they have achieved the level. The Ad is a programme in its own right that educates students for a profession. In the application process for applying new Ad-programmes, the institutes underpin the actual need in the professional field for graduate Ad students in this particular profession.

APPENDIX I The ZelCom model

Level: HIGH Complexity and LOW Autonomy	Level: Average Complexity and Autonomy	Level: LOW Complexity and HIGH Autonomy
<p style="text-align: center;">Complexity: high</p> <ul style="list-style-type: none"> - A variety of assignments is to be carried out in varying situations. - Activities are complex, unfamiliar and lack structure. - The problems are to be analysed. - The required data is to be collected. - There is no standard approach; new procedures are to be developed. - Sophisticated specialist knowledge and skills are required as well as knowledge and skills that transcend the profession. - New technologies are to be applied. - New knowledge and skills are to be developed. - The situations are unfamiliar, dynamic and non-transparent. - The organisation is large and there are many rules that must be taken into account. - Time pressure is high. - The activities have a large impact. - Several parties and political sensitivities must be taken into account. 	<p style="text-align: center;">Complexity: average</p> <ul style="list-style-type: none"> - Several assignments are to be carried out in one specific situation, or one assignment in varying situations. - Activities are diverse, complex and structured. - The problem is partially familiar, and is still to be analysed in part. - The required data is to be collected. - Standard procedures are in place, these procedures are adapted to varying situations. - Specialist knowledge and skills are required. - The situation is unfamiliar but transparent. - The organisation is of an average size and there are rules that must be taken into account. - Time pressure applies. - The impact and/or the political content of the activities is reasonably high. - Several parties must be taken into consideration. 	<p style="text-align: center;">Complexity: low</p> <ul style="list-style-type: none"> - One assignment is to be carried out in a specific situation. - Activities are simple and structured. - The problem is familiar. - The required data is known. - Standard procedures apply. - Basic knowledge and basic skills are required. - The organisation is small and few rules apply. - Time pressure is low. - The impact and political content of the activities are low. - Few parties are involved.
<p style="text-align: center;">Autonomy: low</p> <p>Students or professionals:</p> <ul style="list-style-type: none"> - Are instructed, coached and/or supervised - Act upon orders/instructions, not on their own initiative - Are coached in their own development process - Do not make decisions on their own - Call in help in unforeseen circumstances - Have an operational role - Have an assisting, supporting or operational role - Are responsible for carrying out their own activities correctly. 	<p style="text-align: center;">Autonomy: average</p> <p>Students or professionals:</p> <ul style="list-style-type: none"> - Receive interim coaching or remote coaching or on call coaching. - (Also) act on their own initiative. - Employ their own development process largely independently - For parts of the assignment make their own choices and make decisions on their own. - Anticipate (within limits) unforeseen circumstances. - Have a tactical role. - Have an operational, advising or organising role. - Are responsible for performing their own duties properly. - Stimulate others. - Coach others. 	<p style="text-align: center;">Autonomy: high</p> <p>Students or professionals:</p> <ul style="list-style-type: none"> - Receive little guidance and coaching. - Act on their own initiative. - Independently employ their own development process. - Reflect independently on their own activities and role. - Make their own choices and make decisions on their own. - Anticipate unforeseen circumstances. - Usually have a strategic role. - Have an advisory, organising, management or policymaking role. - Are largely responsible for their own job and for the results of teams/projects. - Stimulate others. - Train others. - Manage others.

APPENDIX II - Dublin Descriptors for Short Cycle, Bachelor and Master programmes¹¹

Dublin Descriptors		Short Cycle	First Cycle	Second Cycle
		Associate degree	Bachelor	Master
1	Knowledge and understanding	have demonstrated knowledge and understanding in a field of study that builds upon general secondary education ¹³ and is typically at a level supported by advanced textbooks; such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle;	have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education ¹⁴ , and is typically at a level that, while supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;	have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research ¹⁷ context;
2	Applying knowledge and understanding	can apply their knowledge and understanding in occupational contexts;	can apply their knowledge and understanding in a manner that indicates a professional ¹⁵ approach to their work or vocation, and have competences ¹⁶ typically demonstrated through devising and sustaining arguments and solving problems within their field of study;	can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;
3	Making judgements	have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems;	have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;	have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;
4	Communications skills	can communicate about their understanding, skills and activities with peers, supervisors and clients;	can communicate information, ideas, problems and solutions to both specialist and nonspecialist audiences;	can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;
5	Learning skills	have the learning skills to undertake further studies with some autonomy.	have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.	have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.

¹¹ Short but Sweet? report, exploration and implementation of short higher professional education programmes, drawn up by CINOP, in collaboration with smets+ hover+ adviseurs of the Dutch Ministry of Education, Culture and Science.