

Erasmus+ Project:
Developing Professional Qualifications and Training for
European Behaviour Analysts



<http://euroba.org/>

Intellectual Output 2: Referencing EuroBA Competences to Six Partner
National Qualifying Frameworks

2023

EuroBA project partners.



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Parents Education as Autism Therapists
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Project summary

This project is the result of cooperation between international partners from the United Kingdom, Czech Republic, Netherlands, Ireland, Greece, Sweden, and Italy. The project benefitted from a Professional Advisory Group (PAG) that included a further 16 European countries to ensure that the standards and competences developed in the project are acceptable to as many European countries as possible.

The overall objectives of the project were to facilitate transparency and recognition of qualifications for behaviour analysts in Europe. The profession of behaviour analyst started in the early 1970s in North America (Carr, 2011; Hughes & Shook, 2007). However, it is not formally recognised in the European Union (EU). For behaviour analysts to be able to practice within the EU with the same expectations surrounding knowledge, skills, and autonomy and responsibilities, it is necessary to create a clear range of competences for the profession.

The project has 6 Intellectual Outputs (IO). IO1 covers professional standards referenced to European Qualifications Framework (EQF). IO2 outlines the development of the behaviour analyst qualification in the context of the six partner National Qualifications Frameworks (NQF). IO3 provides a detailed glossary of terms in partner languages. IO4 outlines a competency framework for entry-level EuroBA-Technicians (EuroBA-T). IO5 is a competency framework for Master's-level EuroBA (EuroBA-M). IO6 is an online entry-level multimedia course in six partner languages.

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Introduction

This document describes how the European Behaviour Analyst (EuroBA) competences can be referenced to the National Qualifications Framework (NQF) of the six partner countries: the United Kingdom (UK), the Czech Republic (Czechia), the Hellenic Republic (Greece), the Netherlands, Sweden, and Italy. Intellectual Output 2 (IO2) documents the specific learning outcomes for EuroBA competences in terms of the NQF for each partner country. The referencing of the EuroBA competences to local NQFs in partner countries constitutes one of the outcomes from the Erasmus+ project entitled **Developing Professional Qualifications and Training for European Behavior Analysts (2020-2023)**.

The EQF is a tool for professional transparency and mobility throughout the European Union, based on guidelines for matching the learning outcomes of a given profession from one country to another. Its success depends upon the manner in which EU nations reference their NQFs to the EQF level descriptors (European Commission, 2011). In the European Union, professional qualification systems are not directly referenced to the corresponding EQF. In other words, there are virtually no professions that are legally recognised on a pan-EU level. Professions have to be recognised on a national level first, before collaborative recognitions agreements can be negotiated for staff mobility when national qualifications levels are formally linked to the EQF through the referencing process. Thus, for the European qualification for behavior analysts, the relevant national qualification system is the concrete point of reference initially. For the purposes of international transparency and mobility, once qualifications have been legally recognised and training levels in each national system have been agreed, the EuroBA competence levels can be referenced an EQF level and a pan-European agreement can be reached.

The National Coordination Points of each of the seven nations¹ participating in the EuroBA development program have revised their NQFs to correspond to the eight EQF learning outcome levels. Given that the NQFs provide the functional points of reference for the EuroBA qualification levels in each country, and each country's NQF is unique, the purpose of this document is to specify, for each participating nation, their individual NQF in correspondence with the EQF referenced in Intellectual Outcome 1. The present document (IO2) provides documentation of EQF-NQF standardisation to facilitate national certification of the profession of behavior analysis and may serve as a model for nations that will require such documentation.

The correspondence between each national NQF and the EuroBA competences at Entry Level (Technician) and at Master's Level is best understood in the context of the current and prospective educational and professional status of behavior analysis in each of the participating countries. For this reason, the current status of training and professional

¹ Note that Ireland is not included in the NQF referencing reported here, because the Irish partner is the technology expert (not behaviour analysis). Ireland is included in the Professional Advisory Group (PAG) through representation of the Irish Society of Behaviour Analysis (see IO5 for details)

development of behaviour analysis is described for each partner country. These developmental ‘snapshots’ were produced in collaboration with educators, practitioners, and stakeholders in each partner country (cf., Keenan et al. 2022).

Czech Republic

Educational and Professional Development of Behaviour Analysis in Czechia

Applied Behaviour Analysis (ABA) has been slow to gain momentum in the Czech Republic. Prior to the fall of the iron curtain, behaviour analysis was virtually unheard of. Behavioural science started to emerge in the late 1990s. From 2015, parents of children with autism built support for ABA by bringing together politicians and national and international academics, organising the first major ABA conference in Brno, and arranging a Parliamentary hearing in 2016 (Gandalovičová, 2016).

The government supported these developments in a 5-year plan, with the development of university-based training in behaviour analysis, funding for training the first 15 Czech behaviour analysts through international MScABAs, and the establishment of the Centre for Applied Behaviour Analysis at Masaryk University in Brno (Roll-Pettersson et al., 2020). By 2021, the number of behaviour analysts had risen to about 40 practitioners (Kingsdorf & Pančocha, 2020).

During this critical 5-year period, the Czech Society of Applied Behaviour Analysis (CSABA) was established in 2016, followed by the foundation of the Working Group for Applied Behaviour Analysis of the Czech Medical Society (Kelly et al., 2018).

In 2016, there was a decree by the Government Committee for Citizens with Disabilities at the Office of the Government of the Czech Republic which issued an initiative to address the situation of people with autism and their families (Vládní výbor pro zdravotně postižené občany [Government Committee], 2016). It outlined the need to establish a comprehensive system of professional training in ABA with support from national health insurance. Act no. 201/2017 Coll. (Zákon 201/2017), which amended the Act no. 96/2004 Coll. (Zákon 96/2004), was adopted shortly after this. It specified the need to establish conditions for obtaining and recognising competence to practice as a behaviour analyst (Act on Allied Health Professions).

Subsequently, the Ministry of Health of the Czech Republic issued related decrees that described the minimum standards for theoretical and practical training (Vyhláška [Decree] 39/2005 Coll.) and detailed the scope of practice of each profession (Vyhláška [Decree]

55/2011 Coll.). In 2017, the new allied health profession of behaviour analyst was established, including the ranks of assistant behaviour analyst and behaviour technician. In 2017, Jana Gandalovičová, the mother of a child on the autism spectrum and one of the main drivers of this work, was awarded Autism Speaks' International Award (Autism Speaks, 2017) and, in 2018, she received the BACB's Michael Hemmingway Award (BACB, 2018).

By 2021, the CSABA had over 50 full members including local behaviour analysts, assistant behaviour analysts, behaviour technicians, and other professionals who use ABA procedures in their practice. Even with this expansion of ABA, intervention as well as education based on ABA principles is most often implemented in the form of individual home-based programs. This may be changing, though, as ABA-based practices have recently found their place in speech therapy in the Czech Republic. The Association of Clinical Speech-Language Pathologists (SLPs) has granted accreditation to continuing education of SLPs focused on ABA. There has been increased interest from schools to use practices based on ABA. In fact, in 2021, the first medical facility providing behavioural interventions for children with neurodevelopmental disabilities was opened in Prague.

At the same time, there was a concerted effort to translate behaviour analytic materials into Czech language, starting with the translation of the multimedia resource SimpleSteps (2016) and the 'white book' (Cooper, Heron, & Heward, 2020). Thus, increased numbers of people with neurodevelopmental disabilities have access to interventions based on ABA (Kingsdorf & Pančocha, 2021) and there is a positive trend of increasing interest of schools in providing in-service staff training in ABA-based practices.

Historical Context of ABA in the Czech Republic

When behaviour analysis was beginning to gain popularity in the West, the Czech Republic was strongly influenced by Marxist ideology, resulting in its rejection of knowledge coming from there. In one example from a Czech journal at that time, Vlácil (1975) argued that the emergence of behaviourism was conditioned not only by the development of psychological theory, but more importantly by the broader social context and the historical situation in capitalist countries. As a result, theories developed in the region which diminished the importance of a man as a subject of history and, therefore, the importance of his consciousness. Even today, in the Czech professional circles, one can still encounter misunderstandings of the basic principles of behaviour or notions that behaviourists equate human beings with lower animals or automatic machines.

After the fall of the Iron Curtain in the early 1990s, Czech social sciences regained their independence and started to catch up with the rest of the developed world. The Czech Society of CBT was founded in 1991 and CBT is currently one of the mainstream approaches in the treatment of a wide range of psychological problems from anxiety and depression to eating disorders.

In contrast, behavioural interventions based on the principles of ABA, which focus on skill acquisition and development of adaptive behaviours in individuals with neurodevelopmental

disabilities (ADHD, ASD) and intellectual disabilities, have remained unnoticed by the Czech professional communities until recently. Only in the last 30 years, have a range of approaches and intervention programs for children with behavioural needs, such as those with autism, emerged in the Czech Republic. Zuzana Žampachová (2014), one of the leading Czech specialists in ASD education, touted applied behaviour analysis and structured teaching to be the most effective strategies for teaching children with ASD.

However, currently the most widely used approach in the Czech educational system is structured teaching, which is said to be based on the child's current skill level and builds on structuring space and time and providing visual support in addition to individual approach. Čadilová and Žampachová (2012) pointed out that the Czech structured approach of teaching children with ASD is based on Ivar Lovaas' behaviour intervention program and Eric Schopler's structured teaching. However, in practice, until 2015, the use of services termed as “ABA” was extremely rare and mostly used only in home-based programs. One reason for this may be that ABA-based interventions should be delivered and supervised by well trained professionals - certified behaviour analysts, who were not available in the country until recently.

While in 2015 there were no certified behaviour analysts working in the country (Roll-Pettersson et al., 2020) and rare home-based programs were supervised from abroad, by 2020 there were already 40 self-identified behavioural practitioners (Kingsdorf & Pančocha, 2020). Along with the rising number of professionals, the country has seen an increase in the number of children receiving ABA based interventions at home or at early intervention centers. Several schools also started to incorporate principles of behaviour in their educational programs.

As noted above, in 2016 the Government Committee for Citizens with Disabilities at the Office of the Government of the Czech Republic issued an Initiative to address the situation of people with ASD and their families (Government Committee, 2016), which also outlined the need to establish a comprehensive system of professional training in ABA with support from national health insurance.

Additionally, parents of children with ASD, who recognised the lack of early intensive behavioural intervention that would lead to effective support of their children, made great efforts to promote ABA. They organised themselves in associations and non-profit organisations (e.g., Parents for Children with Autism) and became important advocates for establishing the profession of behaviour analyst within the Czech system of allied health professions.

The Czech Society of Applied Behaviour Analysis (CSABA) was established in 2016, followed by the foundation of the Working Group for Applied Behaviour Analysis of the Czech Medical Society of Jan Evangelista Purkyně. The main goal of the professional society became the introduction and development of ABA according to international standards.

CSABA helped to promote the national system of professional training in ABA in the healthcare system, education, and social services.

The first CSABA board of directors consisted only of physicians and parents of children with ASD, as there were no ABA professionals working in the country. Thus, in the first years, professional issues were mainly addressed by honorary members of the society from the UK and the USA. It was only in 2020, when a sufficient number of professionals were already working in the country, that the society was handed over to them by the founding members. Currently, CSABA has over 50 full members from among local behaviour analysts, assistant behaviour analysts, behaviour technicians, and other professionals who use ABA procedures in their professional practice.

CSABA currently serves as an association of professionals committed to advancing the science of applied behaviour analysis and the practical application of evidence-based practices. Among other things, the Society supports educational activities in the field of ABA, ensures high quality of professional training and adherence to code of ethics based on international standards. In 2021, CSABA co-organised the first joint Czech and Slovak ABA conference.

Following the example of the United States of America and other countries where behaviour services are provided to clients by specialised professionals, new allied health professions of behaviour analyst, assistant behaviour analyst and behaviour technician were also established in the Czech Republic in 2017. The first step in this process was the adoption of Act no. 201/2017 Coll., which amended the Act no. 96/2004 Coll., on the conditions for obtaining and recognising competence to practice allied health professions and to perform activities related to the provision of health care and on amending certain related acts (Act on Allied Health Professions). Subsequently, the Ministry of Health of the Czech Republic issued related decrees that described the minimum standards for theoretical and practical training (Decree No. 39/2005 Coll.) and detailed the scope of practice of each profession (Decree No. 55/2011 Coll.).

Direct intervention with clients is most often carried out by a behaviour technician, who receives his or her education by studying in a qualification course accredited by the Ministry of Health (AQC). To enter the AQC for behaviour technicians, it is necessary to have completed secondary education with a high school diploma. The AQC itself consists of 100 hours of theoretical education and 120 hours of practical training. The training includes introductory courses to ABA as well as the basics of public health and medical disciplines. Behaviour technicians perform all activities under the supervision of experienced behaviour analyst or assistant behaviour analyst.

More complex behaviour intervention activities are carried out by assistant behaviour analysts, who also receives their training through the AQC. In order to be eligible to join the program, it is necessary to have completed a bachelor's degree in psychology or education (e.g., special education). The AQC itself consists of 300 hours of theoretical education and

1200 hours of practical training. The standard length of study is two years. The content of the course includes behaviour analytic subjects, the foundations of public health and also selected clinical disciplines (e.g., psychiatry, neurology or pediatrics). An assistant behaviour analyst works under the supervision of an experienced behaviour analyst.

A behaviour analyst is a healthcare professional with the most extensive training in ABA. He or she is the only one who can perform their work without professional supervision. To enter the program for behaviour analysts, a Master's degree in psychology or education (e.g., special education) is required. The AQC itself includes 420 hours of theoretical education and 1800 hours of practical training. The standard length of study is two and a half years. The content of the course includes comprehensive behaviour analytic subject matter.

A separate profession for providing behavioural services does not exist in the fields of school education and social services. However, behavioural principles and selected ABA methods are often used by these professionals. Therefore, several short- and long-term in-service training programs focused on ABA are currently offered to teachers and other school staff to broaden their own professional qualifications. These programs are part of the system of continuing teacher education (CTE) provided primarily by teacher training colleges and universities, but also by non-profit organisations that have been accredited by the Ministry of Education. The Faculty of Education of Masaryk University (PDF, MU) currently offers, for example, a course on Fundamentals of Applied Behaviour Analysis, which is designed for teacher assistants and teachers. This introductory training consists of 40 hours and gives graduates the opportunity to use principles of ABA as well as several basic behavioural procedures and techniques when working directly with an individual child or the whole class. A more extensive follow-up program is also offered, designed for classroom teachers, special educators, school psychologists, and educational leaders. This program is divided into four semesters and includes 315 hours of theory and practice in ABA.


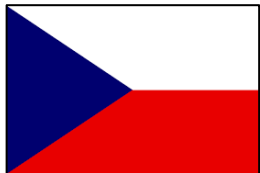
Intervention as well as education based on ABA principles is currently most often implemented in the form of individual home-based programs. However, ABA-based practices have also found their place in speech therapy in the Czech Republic. The Association of Clinical Speech-Language Pathologists has granted accreditation to continuing education of SLPs focused on ABA. In recent years, there has also been an increasing interest of schools to use practices based on ABA. Additionally, in 2021, the first medical facility providing behavioural interventions for children with neurodevelopmental disabilities was opened in Prague, delivering comprehensive EIBI for children with ASD. Overall, growth in the field of ABA has been observed in the Czech Republic across the therapy, education, and medical fields.

Correspondence between Czech National and European Qualification

Networks

The National Referencing Report of the Czech Republic was drafted by the National Coordination Point of the Czech Republic (NCP CZ) at the National Institute for Education, Education Counselling Centre and Centre for Continuing Education of Teachers and published in 2011 (Pohanková et al., 2011). The Czech Republic did not have a NQF at the outset of the EQF development program, so the levels of the NQF correspond directly to the EQF as presented in Table 1.

Table 1. *Czech NQF referenced to the EQF*

 <p>European Qualifications Framework</p>	
<p>LEVEL 8</p> <p>Knowledge at the most advanced frontier of a field of work or study and at the interface between fields</p> <p>The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice</p> <p>Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research</p>	<p>LEVEL 8</p> <p>Doctoral programme PhD degrees three to four years beyond Master (doktor)</p>
<p>LEVEL 7</p> <p>Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research; critical awareness of knowledge issues in a field and at the interface between different fields</p> <p>Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields</p> <p>Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams</p>	<p>LEVEL 7</p> <p>Master's programme, one to three years of tertiary education beyond bachelor or four to six years of tertiary education</p>

<p>LEVEL 6</p> <p>Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</p> <p>Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</p> <p>Manage complex technical or professional activities or projects, taking responsibility for decision making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups.</p>	<p>LEVEL 6</p> <p>Bachelor programme Bc and BcA degrees three to four years of tertiary education</p> <p>Tertiary vocational education DiS degree three to three-and-a-half years of tertiary education</p> <p>Conservatoires - DiS degree - after 2 years</p> <p>NSK qualifications</p>
<p>LEVEL 5</p> <p>Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge</p> <p>A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems</p> <p>Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others</p>	<p>LEVEL 5</p> <p>NSK qualifications (Certificate of Professional Qualifications-Personnel)</p>
<p>LEVEL 4</p> <p>Factual and theoretical knowledge in broad contexts within a field of work or study</p> <p>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study</p> <p>Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities</p>	<p>LEVEL 4</p> <p>Upper secondary education with maturita exam General education (Gymnazium) – four years of upper secondary study</p> <p>Upper secondary education with maturita exam (Vocational education) – four years of upper secondary study</p> <p>Supplementary study leading to a maturita exam - Two years of study after the VET certificate</p> <p>NSK qualifications</p>
<p>LEVEL 3</p> <p>Knowledge of facts, principles, processes and general concepts, in a field of work or study</p> <p>A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information</p> <p>Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems</p>	<p>LEVEL 3</p> <p>Upper secondary education with VET certificate (Vocational education) – three years of upper secondary study</p> <p>NSK qualifications</p>
<p>LEVEL 2</p>	<p>LEVEL 2</p> <p>Lower secondary education Completion of a lower secondary general education programme – nine years</p>

<p>Basic factual knowledge of a field of work or study</p> <p>Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools</p> <p>Work or study under supervision with some autonomy</p>	<p>Upper secondary education with VET certificate - two years of upper secondary study</p> <p>Upper secondary education without VET certificates- 1 or 2 years educational programmes</p> <p>NSK qualifications</p>
<p>LEVEL 1</p> <p>Basic general knowledge</p> <p>Basic skills required to carry out simple task</p> <p>Work or study under direct supervision in a structured context</p>	<p>LEVEL 1</p> <p>Special education Completion of an educational programme in a special school – 10 years</p>

EuroBA-Entry Level Competence Referenced to the Czech NQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Entry Level competences align mostly with Level 3 of the EQF. As the Czech NQF was explicitly keyed to the EQF, referencing is particularly straightforward in this case; candidates for EuroBA competences in the Czech Republic will have completed three years of upper secondary study and hold a Vocational Education Certificate (Výuční list).

EuroBA-Master's Level Competence Referenced to the Czech NQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Master's Level competences align mostly with Levels 6 and 7 of the EQF; candidates for EuroBA competences in the Czech Republic will have completed one to three years of study beyond a bachelor's degree programme and hold a Master's degree.

Hellenic Republic

Educational and Professional Development of Behaviour Analysis in Greece

In the Hellenic Republic, the first public university departments of psychology were established in the early 1990s, and it is in this context that the first two university courses in the Hellenic language in experimental and applied behaviour analysis were established at the Department of Psychology at the University of Crete in 1996. The program moved to the Department of Psychology at Panteion University of Social and Political Sciences (in Athens) in 2006, where it expanded to a seven-semester training sequence in experimental and applied behaviour analysis, in the context of its Bachelor of Science degree in psychology.

Behaviour analytic training at Panteion is supported by a comprehensive 1000-page Hellenic-language introductory text now in its 3rd edition (Mellon, 2013), and supplemented by translations of three seminal books of B. F. Skinner. Students who have completed a series of three introductory courses may enroll in a laboratory course at the Laboratory of Experimental and Applied Behavior Analysis, which provides facilities for experimental research with adults, children, and pigeons. Qualified students may then begin a two-semester undergraduate research thesis in the laboratory as well as a one-semester introductory practicum in applied behaviour analysis at one of several specialised education centers staffed by graduates of the Panteion program, with joint supervision by university faculty.

With only two qualified behaviour analytic professors in the entire National University System, the establishment of a Master's degree program is not yet feasible, but doctoral training in the field is offered both at Panteion University and at the Department of Philosophy, Pedagogy and Psychology at the University of Athens, which also offers introductory courses in Applied Behavior Analysis in its undergraduate and postgraduate programs in developmental psychology. Courses in Behavior Analysis are also offered at several private colleges. Recent recognition of degrees from qualified private institutions of higher learning as equivalent with degrees from the Ministry of Education is expected to increase the number of behaviour analysts engaged in tertiary education and research, and to facilitate the establishment of Master's-level training programs.

The Hellenic Community of Behavior Analysis (ABA Greece) was established at the close of the 2010 Conference the European Association of Behavior Analysis (EABA) in Rethymno, Crete, and incorporated at Panteion University in 2012. The Community has over 200 members and is currently organising its 5th Biannual Scientific Conference; over one hundred Hellenic- and English-language presentations from past conferences have garnered many thousands of views on the internet. ABA Greece is a National Member Organization of EABA.

In 2015, ABA Greece hosted the inaugural Summer School of the EABA. In 2017, the organisation established a 600-hour introductory outreach training program in Behavior Analysis; in 2019, it was incorporated in the newly-established Panteion University Continuing Education Center. In 2021 this accessible overview of behavioural philosophy and its basic and applied sciences, which includes a supervised introductory practicum, was authorised by the Ministry of Education to provide continuing education, with public financial support, for all interested preschool, primary and secondary-level educators across the country. Others who undertake this training work in fields such as psychiatry, nursing, social work and speech therapy, and many study behaviour analysis to better serve the needs of their loved ones. This outreach program has done much to increase awareness of behaviour analysis and to displace misconceptions about behavioural philosophy of science in the Hellenic Republic.

In the 2010s, Verified Course Sequences leading to certification by the BACB were established in Athens at the Deree American College and by the Association for Training in Neurodevelopment/ Monorodi day intervention center, but both programs have been retired after the BACB's December 2019 decision to no longer certify non-US based behaviour analysts. According to the BACB Registry, there are currently 28 Registered Behavior Technicians, seven Board Certified Assistant Behavior Analysts, and 17 Board Certified Behavior Analysts currently working in the Hellenic Republic. Low market value due to the absence of national and European Union recognition of the BACB certification, combined with its high costs relative to local incomes, limited its pursuit among qualified behaviour analysts in our country; the BACB's aforementioned decision to eliminate its international scope of operation has rendered BCBA certification irrelevant to our domestic professional development mission.

As an independent profession, behaviour analysis is not currently recognised by government authorities, and qualified practitioners must obtain positions on the basis of their training in a related field, such as psychology, speech therapy, vocational and special education. As is true elsewhere, a substantial majority of professional behaviour analysts in the Hellenic Republic work with children and adults with developmental and learning disabilities. Qualified practitioners have established more than a dozen multidisciplinary centers providing behaviour analytic service in Athens, Thessaloniki, Xalkida, and Nafplio.

Unfortunately, austerity programs beginning with the 2008 economic crisis and continuing with the Corona 19 pandemic have restricted both government and parental financial resources and, as a consequence, the expansion of organised centers for behaviour analytic services. This has meant that many skilled behaviour analysts provide low-cost, home-based and parallel school support services for struggling Hellenic families, without systematic organisational support. ABA Greece is currently developing a national certification mechanism; European Union recognition and certification of basic competencies of behaviour analysts would substantially facilitate its development and the establishment of an independent professional identity in the Hellenic Republic.

Correspondence between Greek National and European Qualification Networks

The National Referencing Report of the Hellenic Republic was drafted by the National Organization for Certification of Qualifications and Vocational Guidance (EOPPEP, 2016). A summary of levels of the NQF as referenced to the EQF is presented in Table 2.

Table 2. *Greek NQF referenced to the EQF*

 European Qualifications Framework	
<p>LEVEL 8</p> <p>Knowledge at the most advanced frontier of a field of work or study and at the interface between fields</p> <p>The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice</p> <p>Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research</p>	<p>LEVEL 8</p> <p>Doctorate</p>
<p>LEVEL 7</p> <p>Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research; critical awareness of knowledge issues in a field and at the interface between different fields</p> <p>Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields</p> <p>Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams</p>	<p>LEVEL 7</p> <p>Master's degree</p>
<p>LEVEL 6</p> <p>Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</p> <p>Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</p>	<p>LEVEL 6</p> <p>Bachelor's degree</p>

Manage complex technical or professional activities or projects, taking responsibility for decision making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups.	
<p>LEVEL 5</p> <p>Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge</p> <p>A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems</p> <p>Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others</p>	<p>LEVEL 5</p> <p>Vocational post-secondary school 'degree' for graduates of EPAL apprenticeship class, level 5 (post-secondary level)</p> <p>Vocational training diploma (post-secondary level)</p> <p>Post-secondary and not higher education diploma or 'degree'</p>
<p>LEVEL 4</p> <p>Factual and theoretical knowledge in broad contexts within a field of work or study</p> <p>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study</p> <p>Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities</p>	<p>LEVEL 4</p> <p>Vocational school certificate</p> <p>Vocational upper secondary school 'degree'</p> <p>EPAL certificate</p> <p>General upper secondary school certificate</p>
<p>LEVEL 3</p> <p>Knowledge of facts, principles, processes and general concepts, in a field of work or study</p> <p>A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information</p> <p>Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems</p>	<p>LEVEL 3</p> <p>Vocational training school certificate (post lower secondary level)</p> <p>IEK certificate (initial vocational training-post lower secondary level)</p>
<p>LEVEL 2</p> <p>Basic factual knowledge of a field of work or study</p> <p>Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools</p> <p>Work or study under supervision with some autonomy</p>	<p>LEVEL 2</p> <p>Lower secondary school certificate (compulsory)</p>
<p>LEVEL 1</p> <p>Basic general knowledge</p>	<p>LEVEL 1</p> <p>Primary school certificate (compulsory)</p>

Basic skills required to carry out simple tasks	
Work or study under direct supervision in a structured context	

EuroBA Entry Level Competence Referenced to the Greek NQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Entry Level competences align mostly with Level 3 of the EQF. Greek candidates for EuroBA competences at the entry level will either hold a vocational training school certificate (post lower-secondary level) or an IEK certificate (initial-level vocational training after lower secondary level education).

EuroBA-Master's Level Competence Referenced to the Greek NQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Master's Level competences align mostly with Levels 6 and 7 of the EQF; candidates for EuroBA competences in the Hellenic Republic will have earned a Master's degree.

Netherlands

Educational and Professional Development of Behaviour Analysis in the Netherlands

There is no formally accredited training and/or education for behaviour analysts in the Netherlands, yet a substantial number of services that use principles of ABA to support young people on the autism spectrum and their families have been founded over the last 25 years. Many of these services were set up by parent initiative, e.g., Robertshuis (2006), de Droomboom (2006), and Stichting Raeger (2011). Using the principles of ABA, these services support children, adolescents and (young) adults with a diagnosis of autistic, developmental disorders and/or other psychiatric or behavioural diagnoses, such as ADHD, attachment disorder, Oppositional Defiant Disorder (ODD), Obsessive Compulsive Disorder (OCD), incontinence and eating problems. Typically, ABA-based support is provided in multidisciplinary teams together with speech and language therapy as well as occupational therapy.

In a first attempt to draw up the history of ABA in the Netherlands, four activities were initiated at the beginning of 2021:

(1) an internet search for ABA services in the Netherlands, which yielded 40 organisations;

- (2) a survey that was sent to all these organisations to acquire information on structural characteristics of their organisation (e.g., number of staff with and without formal (ABA) training, level of educational background of staff (e.g., vocational, higher education); number and characteristics of clients, number of service locations, and type of ABA services;
- (3) a search in the certificants registry of the Behavior Analyst Certification Board, Inc. (BACB) for Dutch certified/registered professionals (e.g., RBT®, BCaBA®, BCBA®, and BCBA-D®), and
- (4) archival research, in which any reference to ABA in the Netherlands is extracted from (in)formal documents in education, services, and/or personal archives.

The (preliminary) results of Activities 1-3 illustrate the relatively young history of ABA in the Netherlands. The first services claiming to provide ABA services were founded in the 1980s, however, the majority of organisations in operation were set up since 2010 (Figure 1, below). Number of certificants has increased steadily since then and in 2021 there are a total of n=40. Based on the initial results of the survey (Activity 2), staffing of 10/40 of the organisations ranged from 1 member of staff to 1915 staff members (average 303 staff, SD 645.5). The number of clients who received ABA-based services from these agencies ranged from n=4 to n=7485 clients (average 941, SD 2362.4).

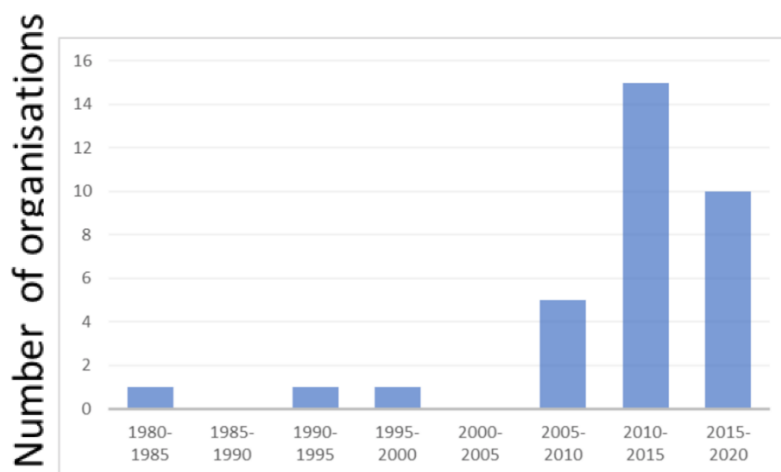


Figure 1. *Year of foundation of services in the Netherlands providing ABA.*

Figure 2 (below) illustrates the number of staff with formal training and certification in ABA. In 2021, there are at total of n=198 professionals who had obtained some form of registration/certification with the BACB (152 RBT®, 3 BCaBA®, 42 BCBA®, and 1 BCBA-D®). Most of these staff are registered as “active”, however, n=43 of the RBT® registrations had expired and n=3 RBT®s were non-active.

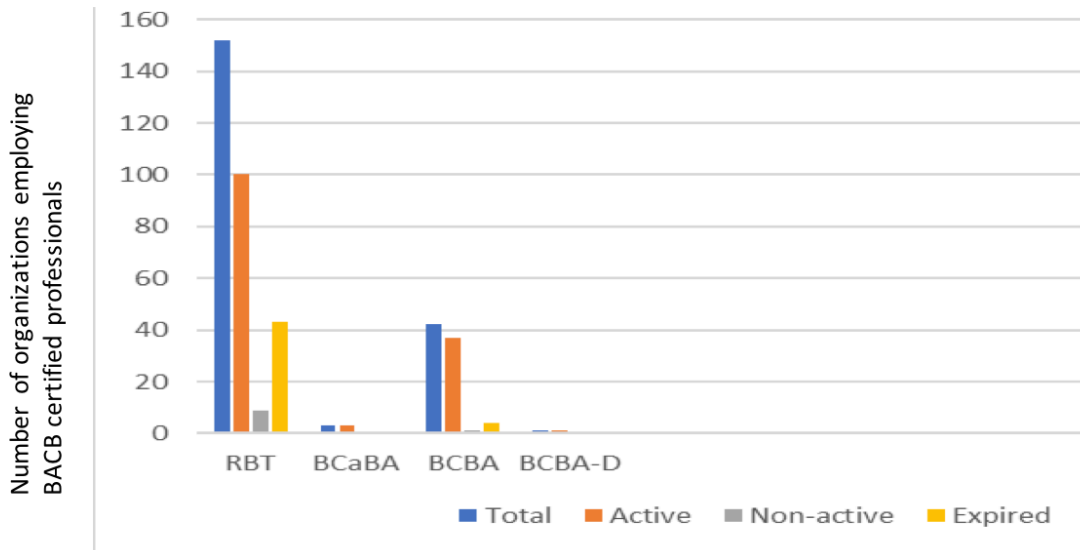


Figure 2. Number of BACB certificants in the Netherlands according to BACB registry (reference date 26.10.2021).

Figure 3 (below) shows that the distribution of behaviour analysts employed in the ABA organisations is uneven. The majority of ABA-based organisations (N=16/40) in Netherlands, employ at least one BC(a)BA; in 14 ABA organisations the number of certified behaviour analysts unknown; and 10 ABA organisations do not employ a single certified behaviour analyst.



Figure 3. Number of Dutch ABA organisations who employed behaviour analysts
 Note: unknown indicates behaviour analyst qualification unknown; BC(a)BA indicates behaviour analyst certification either BCBA or BCaBA

Evidently, the discrepancy between ABA services has implications for service quality and intervention fidelity (Huskens & Palmen, 2016). Neidt and Schenk (2012) explored early intensive behaviour interventions, including Pivotal Response Training (PRT), Discrete Trial Teaching (DTT), and Picture Communication Exchange Programs (PECS), at three organisations in the Netherlands, and found that, rather than offering high fidelity ABA-based supports, they provided a rather eclectic combination of interventions.

Currently, only a handful of in-service workshops and courses in ABA are offered in the Netherlands that are not accredited by any independent accreditation bodies, such as the Dutch-Flemish Accreditation Organisation (NVAO) and/or professional bodies (such as the Dutch Institute for Psychologists (NIP) or the Dutch Association for Educationalists and Pedagogues (NVO)).

In order to pave the way ahead, an ABA consortium met in 2021 to emphasise the importance of the development of nationally recognised and accredited ABA training and professionalisation opportunities to meet the current and future needs of ABA service users.



The aims they identified were

- (1) to encourage and/or maintain high standards in ABA-based support and early behavioural intervention services;
- (2) to enable future accredited ABA education and training opportunities;
- (3) to secure the future of high-quality ABA-based support in the Netherlands.

Correspondence between Dutch National and European Qualification Networks

The National Referencing Report of the Netherlands was drafted by the National Organisation for Certification of Qualifications and Vocational Guidance (NLFQ, 2019). A summary of levels of the NQF as referenced to the EQF is presented in Table 3.

Table 3. Dutch NQF referenced to the EQF

 <p>European Qualifications Framework</p>	
<p>LEVEL 8</p> <p>Knowledge at the most advanced frontier of a field of work or study and at the interface between fields</p> <p>The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice</p>	<p>LEVEL 8</p> <p>Doctorate/PhD (leading to title: doctor)</p>

<p>Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research</p>	
<p>LEVEL 7</p> <p>Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research; critical awareness of knowledge issues in a field and at the interface between different fields</p> <p>Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields</p> <p>Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams</p>	<p>LEVEL 7</p> <p>Master of Science (leading to MSc degree).</p>
<p>LEVEL 6</p> <p>Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</p> <p>Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</p> <p>Manage complex technical or professional activities or projects, taking responsibility for decision making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups.</p>	<p>LEVEL 6</p> <p>Bachelor of Science or Diploma of Higher Education at college (Higher Professional Education)</p>
<p>LEVEL 5</p> <p>Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge</p> <p>A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems</p> <p>Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others</p>	<p>LEVEL 5</p> <p>Associate degree Associate Degree: this refers to a two-year course at a Higher Professional Education College, that, in terms of level, is in between Year 3 (Bachelor) of a Higher Professional Education (HBO, see Level 6) and Year 4 of a Secondary Vocational Education study (see level 4). Also, an Associate Degree is more applied education compared to Higher Professional Education courses.</p>
<p>LEVEL 4</p> <p>Factual and theoretical knowledge in broad contexts within a field of work or study</p>	<p>LEVEL 4</p> <p>Level 4a, one needs a diploma at MBO Level 4 Level 4+: VWO diploma (preparatory academic education/pre-university)</p>

<p>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study</p> <p>Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities</p>	<p>education, 6 years, which is comparable to A levels, gives you direct access to courses at university)</p> <p>Pre-university education for adults</p> <p>Upper secondary general education for adults</p> <p>Upper secondary general education</p>
<p>LEVEL 3</p> <p>Knowledge of facts, principles, processes and general concepts, in a field of work or study</p> <p>A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information</p> <p>Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems</p>	<p>LEVEL 3</p> <p>VET Level 3 (vocational training, vakopleiding) lasts 3 years and leads to Secondary Vocational Education (diploma at MBO level 3)</p>
<p>LEVEL 2</p> <p>Basic factual knowledge of a field of work or study</p> <p>Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools</p> <p>Work or study under supervision with some autonomy</p>	<p>LEVEL 2</p> <p>Prevocational Education (VMBO, 4 levels, diploma at levels 2, 3, or 4) and diploma at MBO level 2</p>
<p>LEVEL 1</p> <p>Basic general knowledge</p> <p>Basic skills required to carry out simple tasks</p> <p>Work or study under direct supervision in a structured context</p>	<p>LEVEL 1</p> <p>Primary school certificate (compulsory)</p> <p>MBO level 1 diploma, or VMBO diploma Level 1</p>

EuroBA-Entry Level Competence Referenced to the Dutch NQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Entry Level competences align mostly with Level 3 of the EQF. Dutch candidates for EuroBA competences at the entry level will have completed a VAT Level 3 vocational training program.

EuroBA-Master's Level Competence Referenced to the Dutch NQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Master's Level competences align mostly

with Levels 6 and 7 of the EQF; candidates for EuroBA competences in the Netherlands will have earned a Master's degree.

Sweden

Educational and Professional Development of Behaviour Analysis in Sweden

The history of behaviour analysis in Sweden can be traced back to 1951 when B.F. Skinner gave a presentation at the 13th International Conference of Psychology in Stockholm (Arntzen & Pellon, 2021). Early Intensive Behaviour Intervention (EIBI) was introduced in Sweden approximately 35 years ago by the Swedish psychologist Örjan Swahn.

However, despite the spread and interest of EIBI, it was not until 2004, after parental lobbying, that the first graduate-level BACB verified course sequence (VCS) in behaviour analysis with a focus on autism was launched at the Karolinska Institute (Roll-Pettersson & Ala'i-Rosales, 2009; Roll-Pettersson et al., 2010). This was made possible through international support and collaboration with BACB. Participating students were, and still are, active practitioners with academic backgrounds in speech-language therapy, special education, psychology, social work, and occupational therapy.

In 2006, the course sequence was moved to the Stockholm Institute of Education, and in 2010, to Stockholm University, where it is currently delivered jointly by the Department of Psychology and the Department of Special Education. The VCS is ABAI approved for the 4th edition BACB task list. As of 2017, Stockholm University offers the only Master's program within Sweden in applied behaviour analysis. In December 2021, there were 15 active Swedish BCBA®s and one BCBA-D®; of these BACB certificants, eight are psychologists, seven speech-language-pathologists and one special education teacher. Additionally, more than 200 students have taken the VCS coursework without pursuing certification.

In Sweden, applied behaviour analysis remains largely unknown to the general public. However, the embrace of behaviour analytic interventions in certain pre-schools has increased, especially in those in which a child on the autism spectrum is enrolled. Indeed habilitation recommendations state that first choice interventions for preschool children with autism should be based on the principles and procedures of ABA (Bromark & Granat, 2012). In current job announcements, a number of employers from habilitation centers, psychiatric services, schools, special schools, and group homes request that applicants should be educated in applied behaviour analysis.

Uppsala University is developing coursework in ABA and is also finalising a Schoolwide Positive Behavioural Intervention and Support project which has led to a cultural adaptation called *Inclusive Behavioral support In School* (IBIS). The IBIS project has recently obtained an external grant to evaluate this adapted version involving approximately 100 schools.

At Linnaeus University and Stockholm University two doctoral projects are currently studying the PAX Good Behavior Game (GBG) and, after a cultural adaptation to the Swedish school context, the PAX GBG has now been taught to more than 1000 teachers in approximately 10% of the municipalities within Sweden.


The Swedish Association for Behavior Analysis (SWABA) was founded in 1996, and now has approximately 200 members of various professional backgrounds. SWABA is an affiliated chapter of the Association for Behavior Analysis International (ABAI) and of the European Association for Behaviour Analysis (EABA). Since 2020, after the BACB's decision to change its certification requirements, SWABA is involved in a collaboration between representatives from the Nordic countries (Denmark, Finland, Iceland, Norway, Sweden), discussing quality assurance of behaviour analysis within a Nordic context.

In sum, though applied behaviour analysis appears to be becoming increasingly established and accepted on both grassroot and institutional levels in Sweden, within the context of habilitation services for children on the autism spectrum as well as in a number of schools, it is still not formally recognised as a field in its own right. There are no formal requirements for staff at any level to have knowledge and/or competence in ABA. In order to avoid low quality interventions, and potentially damage the reputation of the field, ensuring high levels of competence among ABA practitioners in Sweden is vital.

Correspondence between Swedish National and European Qualification Networks

The report referencing the Swedish Qualifications Framework (SEQF) to the European Qualifications Framework was drafted by the SEQF-EQF Committee (2015). A summary of levels of the SEQF as referenced to the EQF is presented in Table 4.

Table 4. *Swedish NQF referenced to the EQF*

 <p>European Qualifications Framework</p>	
<p>LEVEL 8</p> <p>Knowledge at the most advanced frontier of a field of work or study and at the interface between fields</p> <p>The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice</p> <p>Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research</p>	<p>LEVEL 8</p> <p>Degrees, third cycle, Annex 2 to Higher Education Ordinance 1993:100 (Doctorate)</p> <p>Degrees, third cycle, Annex to Regulation 1993: 221</p>
<p>LEVEL 7</p> <p>Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research; critical awareness of knowledge issues in a field and at the interface between different fields</p> <p>Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields</p> <p>Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams</p>	<p>LEVEL 7</p> <p>Degrees, second cycle, Annex 2 to Higher Education Ordinance 1993:100 (Master's degree)</p> <p>Degrees, second cycle, Annex to Regulation 1993: 221</p> <p>Degrees, second cycle, in the Annex to Regulation 2007: 1164</p>
<p>LEVEL 6</p> <p>Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</p> <p>Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</p> <p>Manage complex technical or professional activities or projects, taking responsibility for decision making in unpredictable work or study contexts; take responsibility</p>	<p>LEVEL 6</p> <p>Degrees, first cycle, (Bachelor's degree) Annex 2 to the Education Ordinance 1993:100</p> <p>Degrees, first cycle, Annex to Regulation 2007:1164</p> <p>Degrees, first cycle, Annex to Regulation 1993: 221</p> <p>Advanced diploma in Higher Vocational Education</p> <p>Qualifications awarded outside formal education</p> <p>Bachelor's degree</p>

<p>for managing professional development of individuals and groups.</p>	
<p>LEVEL 5</p> <p>Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge</p> <p>A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems</p> <p>Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others</p>	<p>LEVEL 5</p> <p>Diploma in Higher Vocational Education Qualifications awarded outside formal education</p>
<p>LEVEL 4</p> <p>Factual and theoretical knowledge in broad contexts within a field of work or study</p> <p>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study</p> <p>Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities</p>	<p>LEVEL 4</p> <p>Degree from a national programme in upper secondary education – qualification title for students starting 2011 onwards Final grades from a complete national or specially designed programme Degree from municipal adult education and training at upper secondary level – qualification title for students starting 2011 onwards Final grades from municipal adult education and training at upper secondary level Certificate from the general course at upper secondary level from folk high school Qualifications awarded outside formal education</p>
<p>LEVEL 3</p> <p>Knowledge of facts, principles, processes and general concepts, in a field of work or study</p> <p>A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information</p> <p>Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems</p>	<p>LEVEL 3</p>
<p>LEVEL 2</p> <p>Basic factual knowledge of a field of work or study</p> <p>Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools</p> <p>Work or study under supervision with some autonomy</p>	<p>LEVEL 2</p> <p>Final grades from special school at compulsory level</p> <p>Final grades from municipal adult education and training at compulsory level</p> <p>Certificate from upper secondary education for individuals with learning disabilities</p>

	<p>Certificate from special education for adults at upper secondary level</p> <p>Grade from Swedish for immigrants course D, or equivalent awarded by a folk high school</p> <p>Grade from municipal adult education in Swedish for Immigrants course D, or equivalent awarded by a folk high school</p> <p>Certificate from the general course at compulsory school level from folk high school</p>
<p>LEVEL 1</p> <p>Basic general knowledge</p> <p>Basic skills required to carry out simple tasks</p> <p>Work or study under direct supervision in a structured context</p>	<p>LEVEL 1</p> <p>Final grades from compulsory school for pupils with learning disabilities</p> <p>Final grades from special education for adults at compulsory level</p>

EuroBA-Entry Level Competence Referenced to the Swedish SEQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Entry Level competences align mostly with Level 3 of the EQF; thus for Swedes, candidacy for EuroBA competences will be based in part on final grades from compulsory education.

EuroBA-Master's Level Competence Referenced to the Swedish SEQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Master's Level competences align mostly with Levels 6 and 7 of the EQF; candidates for EuroBA competences in Sweden will have earned a second cycle (Master's level) degree.

Italy

Educational and Professional Development of Behaviour Analysis in Italy

The term Behaviour Analysis (and behaviour modification) became known among a small group of Italian psychologists in the early 1970s, thanks to a Conference at Villa Falconieri in Frascati (Rome) attended by Fred S. Keller, among others (Moderato & Presti, 2006; 2019). By attending some other international meetings, like the Experimental Analysis of Behaviour Group (EABG) meetings in Liege in 1983 and 1988, and the series International Congress on Behaviour Studies, particularly the inaugural one in Guadalajara, Mexico, in 1992, a small group of pioneers had the chance to meet scholars, such as B. F. Skinner, Fred S. Keller, William N. Schoenfeld, Charles A. Catania, and Peter Harzem. However, the contextualistic soul, together with the particular interest in the developmental Behaviour Analysis that characterises this pioneering group of behaviour analysts, can be traced back to the contribution of Sidney W. Bijou (Bijou, 1984, 1993).

The 2nd International Congress on Behaviour Studies, which took place in Palermo in 1994, offered a larger Italian community the chance to meet the most influential scholars of the international behaviour analytic community, including Fred Keller. He delivered his last speech at that meeting before his death. Noteworthy, the first International Conference of ABAI took place in Venice in 2001, at which the first nucleus of the European Association for Behaviour Analysis (EABA) was established, followed by the official founding of EABA that took place in Parma two years later (Arntzen, Hughes, Pellón, Moderato, 2009). Thus, though small, the Italian behaviour analytic community played a significant role in the European development of behaviour analysis.

Behaviour Analysis is not officially taught in any Italian University. There is no Professor of Behaviour Analysis, and there is no Master's degree (i.e., Laurea Magistrale) program in behaviour analysis. Some private institutions deliver postgraduate course sequences in ABA of different quality and length, at three levels (technician, assistant, analyst) that resemble the BACB levels. The term 'certification' has no status in the Italian welfare system because health professions (e.g., physicians -including child psychiatrists - psychologists, speech pathologists, physiotherapists) are ruled by state laws, while the Ministry of Education regulates special educators.

As in many EU countries, behaviour analysts are not formally recognised or regulated as a distinct profession in Italy; the profile of behaviour analysts is not (and perhaps cannot be) clearly defined because, in many respects, it overlaps with some functions and task lists of the psychologists. In 2011, the Higher Institute of Health (l'Istituto Superiore di Sanità; ISS) published Guide Line 21 (LG 21). ISS is a public law body that, as the technical-scientific body of the National Health Service in Italy under the Ministry of Health, carries out research, experimentation, control, consulting, documentation, and training in public health.

LG 21 acknowledges ABA-based procedures as Evidence Supported Treatment (EST). Autistic children are the main client group of child psychiatry services.

Sadly, few child psychiatrists are trained in Behaviour Analysis and have the minimum knowledge to understand basic principles of Behaviour Analysis without bias or misrepresentations (90% are psychoanalytically trained). For this reason, ISS funded and organised a course sequence for them not to become behaviour analysts but to make them able to understand if an intervention appointed as ABA-based is well designed, well implemented, and effective. The 3rd edition of this course sequence is about to start. The instructors are selected behaviour analysts.

A child psychiatrist of SSN delivers an early preliminary diagnosis and eventually prescribes the intervention, usually consisting of 45 minutes twice a week with a speech pathologist and psychomotricist (a kind of developmental physiotherapist). The National Health Service does not officially acknowledge the BCBA®, BCaBA®, RBT® certifications.

In 2014 the Italian Society of Experimental and Applied Behavior Analysis (SIACSA, 2014) was funded. SIACSA established a directory of behaviour analysts (AdC), assistant behaviour analysts (aAdC), and technicians (Tac) that meet minimum professional standards. The Associazione Tecnici ABA (ASSOTABA, 2014) is an association that primarily includes behaviour technicians. In February 2020, a few days before the lockdown for COVID-19, SIACSA and ASSOTABA merged to create the new association ABA-Italia (<https://www.abaitalia.org/>), which includes 355 Behavior Analysts (AdC), 155 assistant Behavior Analysts (aAdC), and 456 Behavior Technicians (TAC).

The two leading family associations in the field, Associazione Nazionale Genitori Soggetti Autistici (ANGSA, 2020) and Associazione Nazionale Famiglie di Persone con Disabilità Intellettiva e/o Relazionale (ANffAS, 2020) endorsed ABA Italia. ANGSA e ANffAS play a control role chairing the ABA Italia Ethics Committee. Finally, ABA Italia, through its Scientific Committee that includes the most distinguished Italian behaviour analysts, developed a set of rules to define the highest quality behaviour analyst training.



Those rules reflect BACB criteria with some differences. The training for Technicians levels is a post-bachelor degree course sequence of 70 hours (instead of 40); there are two course sequences for students who want to becoming behaviour analysts, one for early interventions and one for those who work with adolescents and young adults. This population has special needs, including quality of life, independent life, and psychological disorders like anxiety, depression, and obsessive-compulsive disorders (Oppo et al., 2019).

Correspondence between Italian National and European Qualification Networks

The National Institute for Development of Vocational Training (ISFOL), the EQF National Coordination Point for the Italy, adopted its First Referencing Report to the European

Qualification Network (ISFOL, 2012). A summary of levels of the NQF as referenced to the EQF is presented in Table 5.

Table 5. Italian NQF referenced to the EQF

 European Qualifications Framework	
<p>LEVEL 8</p> <p>Knowledge at the most advanced frontier of a field of work or study and at the interface between fields</p> <p>The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice</p> <p>Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research</p>	<p>LEVEL 8</p> <p>Research doctorate</p> <p>Academic diploma for research training</p> <p>Specialisation diploma</p> <p>Second level university Master's</p> <p>Academic specialisation diploma</p> <p>Higher specialisation diploma or Master's</p>
<p>LEVEL 7</p> <p>Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research; critical awareness of knowledge issues in a field and at the interface between different fields</p> <p>Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields</p> <p>Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams</p>	<p>LEVEL 7</p> <p>Master's degree</p> <p>Second level academic diploma</p> <p>First level university Master's</p> <p>Academic specialisation diploma</p> <p>Higher specialisation diploma or Master's</p>
<p>LEVEL 6</p> <p>Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</p> <p>Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</p>	<p>LEVEL 6</p> <p>Bachelor's degree</p> <p>First level academic diploma</p>

Manage complex technical or professional activities or projects, taking responsibility for decision making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups.	
<p>LEVEL 5</p> <p>Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge</p> <p>A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems</p> <p>Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others</p>	<p>LEVEL 5</p> <p>Higher technical education diploma</p>
<p>LEVEL 4</p> <p>Factual and theoretical knowledge in broad contexts within a field of work or study</p> <p>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study</p> <p>Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities</p>	<p>LEVEL 4</p> <p>Professional technician diploma</p> <p>Upper secondary education diploma Licei</p> <p>Upper secondary education diploma</p> <p>Upper secondary education diploma</p> <p>Higher technical specialisation certificate</p>
<p>LEVEL 3</p> <p>Knowledge of facts, principles, processes and general concepts, in a field of work or study</p> <p>A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information</p> <p>Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems</p>	<p>LEVEL 3</p> <p>Professional operator certificate (<i>Attestato di qualifica di operatore professionale</i>)</p>
<p>LEVEL 2</p> <p>Basic factual knowledge of a field of work or study</p> <p>Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools</p> <p>Work or study under supervision with some autonomy</p>	<p>LEVEL 2</p> <p>Compulsory education certificate</p>
<p>LEVEL 1</p> <p>Basic general knowledge</p> <p>Basic skills required to carry out simple tasks</p> <p>Work or study under direct supervision in a structured context</p>	<p>LEVEL 1</p> <p>Lower secondary school-leaving diploma</p>

EuroBA-Entry Level Competence Referenced to the Italian NQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Entry Level competences align mostly with Level 3 of the EQF. Italian candidates for EuroBA competences at the entry level will either hold Professional operator certificate (*Attestato di qualifica di operatore professionale*) as entry-level technicians.

EuroBA-Master's Level Competence Referenced to the Italian NQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Master's Level competences align mostly with Levels 6 and 7 of the EQF. Thus, a prerequisite qualification for EuroBA competences in the Republic is the completion of one of the following advanced degrees: Master's degree, Second level academic diploma, First level university Master's, Academic specialisation diploma, or Higher specialisation diploma/master's.

United Kingdom of Great Britain and Northern Ireland

Educational and Professional Development of Behaviour Analysis in the UK

Up-until 2023, the position of behaviour analysts was not strictly defined in the UK. The job title was not protected or regulated. The title BCBA® was used in place of adequate national registration, in fact, only a very small number of jobs advertised in the UK listed BCBA® or MScABA or ABA Tutor as essential or desirable criteria. In 2023, the professional register of behaviour analysts was accredited by the Professional Standards Authority² (PSA). Before describing the importance of this development, first some general notes about the history of behaviour analysis and professional recognition in the UK.

There are 5 Master's level Verified Course Sequences (VCS) being taught at UK Universities (ABAI, 2021). A number of universities and private providers also offer RBT® training, either in person or online³. The qualifications achieved in these courses remain academic qualifications that have been established to meet the BACB criteria. However, they never were officially recognised by the UK government agencies; the Health Care Professional Council (HCPC) or the Professional Standards Authority (PSA).

² <https://www.professionalstandards.org.uk/home>

³ <https://uk-sba.org/about-behavior-analysis/university-training/>

Most Master's level courses in the UK take one year to complete for full-time students or 2 or 3 years for part-time time students. In behaviour analytic Master's courses, the curriculum covers the Behavior Analyst Certification Board (BACB) tasklist (4th or 5th Edition). Courses are verified by the Association for Behaviour Analysis (ABAI VCS). The VCS content usually provides the following modules, although the exact structure differs from course to course:

- Fundamental elements of behaviour change
- Ethics in Behaviour Analysis
- Behaviour Change and Education
- Assessment in Behaviour Analysis
- Concepts and principles of behaviour analysis
- Evaluation in behaviour analysis
- Master's dissertation or Portfolio

Some Master's-level courses in the UK offer supervised practice placements, while others expect students to organise their own placements and supervision. Once students have met BACB eligibility criteria, they sit a 4-hour online exam before becoming Board Certified Behaviour Analysts (BCBA). In order to maintain certification, candidate have to evidence completion of 32 continued education units (50 min training per unit) during 2-year recertification cycles.

Registered Behaviour Technician (RBT) training is delivered by Universities and private providers and includes 40-hour training according to the BACB RBT tasklist (2nd Edition). Some courses provide practice supervision and/or assessment while other provide classroom hours only. Once students have met BACB eligibility criteria, they sit an online exam before becoming Registered Behaviour Technicians. RBTs have to be supervised by CBAs.

When, in Dec 2019, the BACB announced the termination of eligibility to sit the exam for non-USA/Canada residents by end of 2022, the UK-Society for Behaviour Analysis (UK-SBA) applied for a 3-year extension. The extension was granted to the UK and ends in 2025. In the meantime, in the UK Government had introduced a new system of professional recognition via the PSA (2014). The PSA reviews the work of the regulators of health and care professionals; accredits organisations that register health and care practitioners in unregulated occupations; and gives policy advice to Ministers and others and encouraging research to improve regulation. Thus, to be accredited by the PSA, behaviour analysts needed to be registered.

In 2020, UK Society of Behaviour Analysis (UK-SBA) set up a voluntary register for behaviour analysts with the aim to have this register accredited by the PSA. As of 1 Dec. 2021, a total of 302 behaviour analysts are registered on this register. Applicants for the register need to evidence that they have sufficient training in behaviour analysis; they do not have to be BCBA®s. The applications are reviewed and decisions are made by the UK-SBA board. In late November 2020, the UK-SBA applied for accreditation of this voluntary

register by the Professional Standards Authority (PSA). In early 2023, this accreditation was granted.

In the meantime, the UK-SBA has set up a Taskforce to develop a credentialing system for Behaviour Analysis. The target for this Taskforce is to “ensure that UK-SBA works to establish over the longer-term, a framework for the professional recognition and certification of behaviour analysts across the breadth of behaviour analytical practice” and to “ensure that the UK-SBA meets the education and training requirements of the PSA standards and of the UK-SBA strategic plan.”

In most European countries, Behaviour Analysts have adopted standards set by the BACB. One point often missed in discussions about professional recognition outside of USA, however, is the fact that certifications provided by the BACB are not nationally recognised qualifications in any European country, even prior to the decision by the BACB to change their international focus with effect from January 2023. In fact, no USA-based behaviour analyst title, acronym, or qualification is recognised in non-USA jurisdictions simply because each country can only legislate for their own affairs, and this includes official recognition of professions. Some behaviour analysts had realised this and had begun the process of seeking national recognition for the profession in their countries, while others were jolted into action by the BACB decision.

Correspondence between UK National and European Qualification Networks

The UK Government on behalf of the Devolved Administrations (Northern Ireland Assembly, Scottish Government and Welsh Assembly Government) submitted its Report Referencing the Qualifications Frameworks of the United Kingdom to the European Qualifications Framework in 2009. The UK has four different operational qualification frameworks as depicted in Table 6 below.





Table 6. *UK National Qualification Frameworks*

RQF	Regulated Qualifications Framework (RQF) for general and vocational qualifications	England Northern Ireland	8 levels
CQFW	Credit and Qualifications Framework for Wales for all qualifications	Wales	8 levels
SCQF	Scottish Credit and Qualifications Framework for all qualifications	Scotland	12 levels
FHEQ	Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies	UK degree-awarding bodies (e.g., HE)	5 levels

Source: Report Referencing the Qualifications Frameworks of the United Kingdom to the European Qualifications Framework

Despite the regional and specialty differences there is a great deal of overlap between the systems, and each are standardised to the EQA levels as follows in Table 7.

Table 7. UK Regional NQF referenced to the EQF

 European Qualifications Framework			
EQF level	RCF & CQFW	SCQF	UK Academic level
<p>LEVEL 8</p> <p>Knowledge at the most advanced frontier of a field of work or study and at the interface between fields</p> <p>The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice</p> <p>Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research</p>	LEVEL 8	LEVEL 12	<p>LEVEL 8</p> <p>Doctoral degree</p>
<p>LEVEL 7</p> <p>Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research; critical awareness of knowledge issues in a field and at the interface between different fields</p> <p>Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields</p> <p>Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams</p>	LEVEL 7	LEVEL 11	<p>LEVEL 7</p> <p>Master's degree</p>
<p>LEVEL 6</p> <p>Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</p> <p>Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</p>	LEVEL 6	LEVEL 10/9	<p>LEVEL 6</p> <p>Undergraduate degree</p>

Manage complex technical or professional activities or projects, taking responsibility for decision making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups.			
<p>LEVEL 5</p> <p>Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge</p> <p>A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems</p> <p>Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others</p>	LEVEL 5 and 4	LEVEL 8/7	LEVEL 5 Foundation/ Certificate
<p>LEVEL 4</p> <p>Factual and theoretical knowledge in broad contexts within a field of work or study</p> <p>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study</p> <p>Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities</p>	LEVEL 3	LEVEL 6	LEVEL 4 AS and A level
<p>LEVEL 3</p> <p>Knowledge of facts, principles, processes and general concepts, in a field of work or study</p> <p>A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information</p> <p>Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems</p>	LEVEL 2	LEVEL 5	LEVEL 3 General Certificate of Secondary Education (grades A-C)
<p>LEVEL 2</p> <p>Basic factual knowledge of a field of work or study</p> <p>Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools</p> <p>Work or study under supervision with some autonomy</p>	1	4	LEVEL 2 General Certificate of Secondary Education (grades D-G)
<p>LEVEL 1</p> <p>Basic general knowledge</p>	Entry 3	3	LEVEL 1 Skills for Life

Basic skills required to carry out simple tasks			
Work or study under direct supervision in a structured context			
N/A	Entry 2	2	N/A
N/A	Entry 1	1	N/A

EuroBA-Entry Level Competence Referenced to the United Kingdom NQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Entry Level competences align mostly with Level 3 of the EQF. UK candidates for EuroBA competences at the entry level will either hold a General Certificate of Secondary Education (grades A-C).

EuroBA-Master's Level Competence Referenced to the United Kingdom NQF

As detailed in Intellectual Output 1, the learner outcomes in the areas of Knowledge, Skills and Autonomy and Responsibility at the EuroBA-Master's Level competences align mostly with Levels 6 and 7 of the EQF; candidates for EuroBA competences in the United Kingdom will have earned a Master's degree.

Summary

A summary of the six countries' National Qualifications Frameworks is presented in Table 8. A comparison of the national qualifications for Levels 7 (EuroBA-Master's Level) and 3 (EuroBA-Entry Level) reveals that NQF standardisation in each nation produced equivalent learning outcomes requirements, ensuring uniformity of training standards for EuroBA competences across nations.

Table 8. Six-country comparison of National Qualifications Frameworks

					
<p>LEVEL 8</p> <p>Doctoral programme PhD degrees three to four years beyond Master 's(doktor)</p>	<p>LEVEL 8</p> <p>Doctorate</p>	<p>LEVEL 8</p> <p>Doctorate/PhD (leading to title: doctor)</p>	<p>LEVEL 8</p> <p>Degrees, third cycle, Annex 2 to Higher Education Ordinance 1993:100 (Doctorate)</p> <p>Degrees, third cycle, Annex to Regulation 1993: 221</p>	<p>LEVEL 8</p> <p>Research doctorate</p> <p>Academic diploma for research training</p> <p>Specialisation diploma</p> <p>Second level university Master's</p> <p>Academic specialisation diploma</p> <p>Higher specialisation diploma or Master's</p>	<p>LEVEL 8</p> <p>Doctoral degree</p>
<p>LEVEL 7</p> <p>Master's programme, one to three years of tertiary education beyond bachelor or four to six years of tertiary education</p>	<p>LEVEL 7</p> <p>Master's degree</p>	<p>LEVEL 7</p> <p>Master of Science (leading to MSc degree).</p>	<p>LEVEL 7</p> <p>Degrees, second cycle, Annex 2 to Higher Education Ordinance 1993:100 (Master's degree)</p> <p>Degrees, second cycle, Annex to Regulation 1993: 221</p> <p>Degrees, second cycle, in the Annex to Regulation 2007: 1164</p>	<p>LEVEL 7</p> <p>Master's degree</p> <p>Second level academic diploma</p> <p>First level university Master's</p> <p>Academic specialisation diploma</p> <p>Higher specialisation diploma or Master's</p>	<p>LEVEL 7</p> <p>Master's degree</p>
<p>LEVEL 6</p> <p>Bachelor programme Bc and BcA degrees three to four years of tertiary education</p> <p>Tertiary vocational education DiS degree three to three-and-a-half years of tertiary education</p> <p>Conservatoires - DiS degree - 8 years study after 5 years (primary</p>	<p>LEVEL 6</p> <p>Bachelor's degree</p>	<p>LEVEL 6</p> <p>Bachelor of Science or Diploma of Higher Education at college (Higher Professional Education)</p>	<p>LEVEL 6</p> <p>Degrees, first cycle, (Bachelor's degree) Annex 2 to the Education Ordinance 1993:100</p> <p>Degrees, first cycle, Annex to Regulation 2007:1164</p> <p>Degrees, first cycle, Annex to Regulation 1993: 221</p> <p>Advanced diploma in Higher Vocational Education</p>	<p>LEVEL 6</p> <p>Bachelor's degree</p> <p>First level academic diploma</p>	<p>LEVEL 6</p> <p>Undergraduate degree</p>

education) or 6 years study after completion of a lower secondary general education programme NSK qualifications			Qualifications awarded outside formal education Bachelor's degree		
LEVEL 5 NSK qualifications (Certificate of Professional Qualifications-Personnel)	LEVEL 5 Vocational post-secondary school 'degree' for graduates of EPAL apprenticeship class, level 5 (post-secondary level) Vocational training diploma (post-secondary level) Vocational training diploma (post-secondary level) Post-secondary and not higher education diploma or 'degree'	LEVEL 5 Associate degree Associate Degree: this refers to a two-year course at a Higher Professional Education College, that, in terms of level, is in between Year 3 (Bachelor) of a Higher Professional Education (HBO, see Level 6) and Year 4 of a Secondary Vocational Education study (see level 4). Also, an Associate Degree is more applied education compared to Higher Professional Education courses.	LEVEL 5 Diploma in Higher Vocational Education Qualifications awarded outside formal education	LEVEL 5 Higher technical education diploma	LEVEL 5 Foundation/Certificate
LEVEL 4 Upper secondary education with maturita exam General education (Gymnazium) – four years of upper secondary study Upper secondary education with maturita exam (Vocational education) – four years of upper secondary study Supplementary study leading to a maturita exam - Two years of study after the VET certificate NSK qualifications	LEVEL 4 Vocational school certificate Vocational upper secondary school 'degree' EPAL certificate General upper secondary school certificate	LEVEL 4 Level 4a, one needs a diploma at MBO Level 4 Level 4+: VWO diploma (preparatory academic education/pre-university education, 6 years, which is comparable to A levels, gives you direct access to courses at university) Pre-university education for adults Upper secondary general education for adults Upper secondary general education	LEVEL 4 Degree from a national programme in upper secondary education – qualification title for students starting 2011 onwards Final grades from a complete national or specially designed programme Degree from municipal adult education and training at upper secondary level – qualification title for students starting 2011 onwards Final grades from municipal adult education and training at upper secondary level Certificate from the general course at upper secondary level from folk high school Qualifications awarded outside formal education	LEVEL 4 Professional technician diploma Upper secondary education diploma Licei Upper secondary education diploma Upper secondary education diploma Higher technical specialisation certificate	LEVEL 4 AS and A level
LEVEL 3 Upper secondary education with VET certificate (Vocational education) – three years of upper secondary study NSK qualifications	LEVEL 3 Vocational training school certificate (post lower secondary level) IEK certificate (initial vocational training-post lower secondary level)	LEVEL 3 VET Level 3 (vocational training, vakopleiding) lasts 3 years and leads to Secondary Vocational Education (diploma at MBO level 3)	LEVEL 3	LEVEL 3 Professional operator certificate (<i>Attestato di qualifica di operatore professionale</i>)	LEVEL 3 General Certificate of Secondary Education (grades A-C)

<p>LEVEL 2</p> <p>Lower secondary education Completion of a lower secondary general education programme – nine years</p> <p>Upper secondary education with VET certificate - two years of upper secondary study</p> <p>Upper secondary education without VET certificates- 1 or 2 years educational programmes</p> <p>NSK qualifications</p>	<p>LEVEL 2</p> <p>Lower secondary school certificate (compulsory)</p>	<p>LEVEL 2</p> <p>Prevocational Education (VMBO, 4 levels, diploma at levels 2, 3, or 4) and diploma at MBO level 2</p>	<p>LEVEL 2</p> <p>Final grades from special school at compulsory level</p> <p>Final grades from municipal adult education and training at compulsory level</p> <p>Certificate from upper secondary education for individuals with learning disabilities</p> <p>Certificate from special education for adults at upper secondary level</p> <p>Grade from Swedish for immigrants course D, or equivalent awarded by a folk high school</p> <p>Grade from municipal adult education in Swedish for Immigrants course D, or equivalent awarded by a folk high school</p> <p>Certificate from the general course at compulsory school level from folk high school</p>	<p>LEVEL 2</p> <p>Compulsory education certificate</p>	<p>LEVEL 2</p> <p>General Certificate of Secondary Education (grades D-G)</p>
<p>LEVEL 1</p> <p>Special education Completion of an educational programme in a special school – 10 years</p>	<p>LEVEL 1</p> <p>Primary school certificate (compulsory)</p>	<p>LEVEL 1</p> <p>Primary school certificate (compulsory) MBO level 1 diploma, or VMBO diploma Level 1</p>	<p>LEVEL 1</p> <p>Final grades from compulsory school for pupils with learning disabilities</p> <p>Final grades from special education for adults at compulsory level</p>	<p>LEVEL 1</p> <p>Lower secondary school-leaving diploma</p>	<p>LEVEL 1</p> <p>Skills for Life</p>

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