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GOOD PRACTICE GUIDE FOR INCLUSIVE EDUCATION FOR VOCATIONAL SCHOOL TEACHERS

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I. STUDENT WITH SPECIAL EDUCATIONAL NEEDS (SPE)

1. Who are students with special educational needs?

The Regulation of the Minister of National Education of August 9, 2017 on the principles of organization and provision of psychological and pedagogical assistance in public kindergartens, schools and institutions indicates the categories of students with special educational needs - these are:

1. disabled,
2. deaf,
3. hard of hearing,
4. blind,
5. visually impaired,
6. with motor disabilities, including aphasia,
7. intellectually disabled to a light degree,
8. intellectually disabled to a moderate or severe degree,
9. with autism, including Asperger's syndrome,
10. with multiple disabilities,
11. socially maladjusted (including truancy, running away from home, drinking alcohol, intoxication, destruction of property, violence, fights, theft, suicide attempts),
12. at risk of social maladjustment,

13. with behavioral and emotional disorders (including attention deficit hyperactivity disorder),
14. with specific learning difficulties (students with dyslexia, dysgraphia, dysorthography, dyscalculia),
15. with educational failures (including students with below-average intelligence),
16. with competence deficits and language impairments,
17. chronically ill,
18. in a crisis or traumatic situation,
19. environmentally neglected,
20. with adaptation difficulties,
21. particularly gifted.

2. A child with special educational needs:

- has an opinion of a psychological and pedagogical counseling center,
- has a decision on the need for special education,
- has neither an opinion nor a certificate.

Keep in mind that a child with special educational needs will not always have a document from a psychological-educational counseling center in the form of an opinion or a certificate. However, this does not mean that such students do not require assistance and appropriate adjustments. Children with SEN are also those in whom it is possible to observe difficulties in the implementation of educational requirements, difficulties

related to health problems or resulting from the functioning of the family environment.

3 How to recognize a child with SEN who does not have an opinion or an evaluation?

Those who recognize individual developmental and educational needs and individual psychophysical capabilities of students are teachers and specialists. They also determine the strengths, predispositions, interests and talents of students, and recognize the causes of educational failures or difficulties in functioning that make it difficult for students to fully participate in school life. Teachers and specialists have the opportunity to get to know students by conducting pedagogical observation at school, in the course of ongoing work with them. The regulations (Regulation of the Minister of National Education on the principles of organization and provision of psychological and pedagogical assistance) indicate the recognition of students' needs, not their diagnosis. Recognizing the psychophysical capabilities and environmental factors that affect the functioning of the student at school serves to support his developmental potential and create conditions for his active and full participation in the life of the school and the social environment. A child who is found to have special educational needs is covered by psychological and pedagogical assistance. Teachers are informed of the obligation to provide assistance during ongoing work with the child. Thus, they are obliged to adapt the ways and methods of work to the psychophysical capabilities of the student. In addition, the student may be covered by other forms of psychological and pedagogical assistance, which are specified in the regulation. Remember that psychological and pedagogical assistance must be provided in cooperation with the student's parents or, when the student is of age, with the student himself.

4. What is available to students with SEN?

Adaptation of educational requirements

The Education Law says that the educational system should ensure the adaptation of the content, methods and organization of teaching to the psychophysical capabilities of students, as well as the possibility of using psychological and pedagogical assistance and special forms of didactic work. In addition, the Regulation of the Minister of Education on the detailed conditions and manner of assessing, classifying and promoting students and listeners in public schools clearly states that educational requirements are adapted to the individual developmental and educational needs and psychophysical capabilities of a student with:

- a decision on the need for special education and the findings contained in the IPET,
- a decision on the need for individual teaching,
- opinion of a psychological and pedagogical counselling centre, including specialized counselling, on specific learning difficulties,
- other opinion of the psychological and pedagogical counselling centre, including specialized counselling, indicating the need for such an adjustment,
- identification of individual developmental and educational needs and individual psychophysical capabilities of the student made by teachers and specialists (applies to students covered by psychological and pedagogical assistance at school),
- a doctor's opinion on the limited possibilities of a student to perform certain physical exercises during physical education classes.

What does this mean in practice for the teacher? Exactly that he is obliged to adjust the requirements for any child who requires such adjustments, no matter what his opinion on the subject is.

What is the adjustment of educational requirements?

Adaptation of educational requirements involves the use of such criteria that take into account the capabilities and limitations of the student, that is, his dysfunctions, difficulties and strengths. These requirements should be adapted to the individual educational and developmental needs and psychophysical capabilities of the student. The purpose of adapting the requirements is to equalize educational opportunities and prevent secondary disorders of the emotional-motivational sphere that may arise, in a situation where the student experiences constant failure.

Adaptation of requirements includes, but is not limited to:

- **teaching organization:** appropriate classroom space (e.g., a seat at the front for a child with transcription problems), classroom labeling (e.g., for dyslexic children with impaired spatial orientation),
- **resources:** appropriate aids (e.g., larger models of solids, in the case of learning geometry, notebooks with wider rulers or slanted rulers for left-handed students, pen caps or specially shaped pencils, crayons, spelling dictionaries, pattern boards, etc.),
- **adaptation of textbooks, worksheets** (e.g., changing the font of writing, the size of letters, not transferring answers to the answer sheet),
- **methods, organization of work, time** (e.g., extending the time for reading, for writing, referring to concreteness, using guiding questions, making sure the student has correctly understood the instruction or helping him/her read the instruction, frequent repetition

of the dictated content, giving notes to paste, using polysensory in teaching, using mind maps, teaching multiplication tables with the help of rhymes or rhymes),

- **homework** (differentiating tasks in terms of their number, level of difficulty, due dates, methods of completion, giving the opportunity to choose),
- **checking knowledge and grading** (e.g., replacing written tests with oral answers or vice versa, questioning from the bench instead of at the blackboard, giving the opportunity to correct mistakes, extending the time on tests and midterms or giving fewer tasks, reading instructions or tasks with content on science tests, not grading spelling correctness, graphic level, valuing the contribution of work, commitment, not just the end result).

It is very important to be aware that the adaptation of educational requirements must not lead to a descent below the core curriculum. Adaptation should mainly concern the forms and methods of work with the student, and only in exceptional cases and far less often the content of teaching (students with intellectual norms should not have the content of teaching changed, which results in lowering the requirements). Therefore, curriculum slogans should not be omitted, but in a difficult situation, they should be implemented at the basic level. A student completing a particular educational stage should be equipped with such a range of knowledge and skills that will allow him to cope with the next stage. We should also remember that the finding of dysfunction in children does not exempt them from school duties - on the contrary. Such students should demonstrate self-reliance and reliability in fulfilling their duties, so that the recommended tasks and systematic work will contribute to overcoming their difficulties.

Adjustment of requirements in exams

Students with special educational needs can benefit from adaptation of the conditions and forms of the exam to their needs and abilities, the **Central Examination Commission** informs, every year. Students can take advantage of, among other things:

- an appropriately prepared examination sheet that takes into account the dysfunctions of particular groups of students,
- technical equipment (e.g., a computer),
- special equipment and resources (e.g., additional lighting, CDs with an adapted recording for the foreign language exam),
- the presence of a specialist (e.g., a surdopedagogue, a tyflopédagogue, another, depending on the needs),
- reading of texts longer than 250 words by a member of the supervisory team,
- adaptation of the rules for grading the examination paper,
- to take the exam in a separate room,
- extending the duration of the exam,
- marking answers to closed tasks in the task booklet, without transferring them to the answer sheet,
- a bilingual dictionary (for foreigners).

The above list is not closed, as there are many more adjustments. It all depends on the child's dysfunction and needs. Adaptations are usually prepared by the school pedagogue on the basis of the documents in his possession (opinion, judgment, medical certificate, etc.), but they can also be granted by the decision of the pedagogical council. Each time, parents are called to the school and informed which adaptations their child can benefit from. Keep in mind that it is the parent who makes the final decision

on whether his child will benefit from the adjustments. To this end, he/she pays his/her signature on the adjustment sheet accordingly.

5. Psychological and pedagogical assistance

Any student with SEN can benefit from psychological and pedagogical assistance. The essence of the psychological and pedagogical assistance provided is:

- recognizing and meeting the individual developmental and educational needs of the student,
- recognizing his/her psychophysical capabilities,
- recognizing environmental factors affecting the functioning of the student in the kindergarten, school and institution, in order to: support his/her developmental potential and create conditions for his/her active and full participation in the life of the school and in the social environment.

A child with special educational needs, within the framework of psychological and pedagogical assistance, can benefit from the following classes: didactic-equalizing, corrective-compensatory, speech therapy, developing emotional-social competencies, other classes of a therapeutic nature, classes developing talents, developing learning skills and related to the choice of direction of education and profession. In addition, students have the opportunity to apply for therapeutic classes and an individualized education path. For both students and their parents, as well as for teachers, psychological and pedagogical assistance includes counseling, consultation, workshops and training. These activities are aimed at supporting parents and teachers in solving educational and didactic problems and developing their parenting skills in order to increase the effectiveness of the assistance provided to children.

Let's remember that psychological and pedagogical assistance is provided to students primarily during ongoing work with them, as I have already mentioned.

6. Special education

- Special education is provided to students who have an evaluation of the need for special education. In addition, students who have been diagnosed with autism, including Asperger's syndrome, or multiple disabilities may be assisted by a co-education teacher (taking into account the recommendations contained in the certificate).
- A student in special education is obliged to carry out compulsory education (compulsory education begins at the beginning of the school year in the calendar year in which the child turns 7 and lasts until the end of elementary school, but no longer than until the age of 18), but at the request of parents may change slightly. Parents may request a postponement of compulsory education, but no longer than until the end of the school year in the calendar year in which the child turns 9. Pupils with an assessment can study in elementary school until the age of 20. They can also extend their education in elementary school (at educational stage I by 1 year, and at stage II by 2 years), and in secondary school by 1 year. This decision is made by the pedagogical council after obtaining the opinion of the team creating the IPET and the consent of the parents or adult student.
- Students with disabilities, social maladjustment and at risk of social maladjustment can benefit from education until the end of the school year in the calendar year in which they turn 20 (elementary school) or 24 (secondary school).

- Students with an evaluation can study together with students without disabilities, socially maladjusted and at risk of social maladjustment in all types of schools. Remember, however, that special departments for socially maladjusted students and those at risk of social maladjustment are not organized in mainstream schools.
- Students with disabilities are entitled to remedial classes (at least 2 hours) with an appropriate specialist.

Ways to achieve the goals of education and upbringing in working with students with special educational needs - students with severe communication disorders, with specific learning difficulties, socially maladjusted, at risk of social maladjustment, outstandingly talented.

1. A student with severe communication disorders (including a student with aphasia)

- in the assessment should take into account the difficulties in the correct formulation of sentences, both in written and oral form;
- the method of testing knowledge should be adapted to the student's perceptual abilities;
- the way of testing and enforcing knowledge should be adapted to his psychophysical capabilities, e.g., do not orally question a student with articulation difficulties;
- use alternative language.

2. Student with specific learning difficulties (dysgraphia, dyslexia, dysorthography, dyscalculia). It is necessary to:

- introduce activating methods and techniques in teaching, use a lot of teaching aids, diversify the teaching process;

- reduce the number of tasks (instructions) to be performed, for example, during a test/quiz;
- control the degree of comprehension of instructions read independently by the student
- avoid pulling out to answer, questioning in front of the whole class;
- take into account difficulties in remembering names, terms;
- take into account poor orientation in time and space (pointing directions, calculating time, converting the scale, calculating the altitude of the sun, determining geographical location, ordering events, etc.);
- take into account difficulties in reading and drawing maps, sketches;
- take into account difficulties in creating diagrams and drawings;
- assist during oral statements by guiding and repeating instructions;
- assess homework frequently;
- when teaching, use association techniques to facilitate memorization;
- do not evaluate errors in the text, but rather its content and factual correctness;
- in the case of dysgraphia, allow the student to do the work on the computer or in print;
- read illegible parts of the work in individual contact with the student;
- take into account in the evaluation of the student's work the correctness of the course of reasoning, and not only the correctness of the final result;
- divide into smaller batches the program material requiring knowledge of many formulas, symbols, transformations. Where possible, allow the use of ready-made formulas, tables, etc.

3. A student who is socially maladjusted or at risk of maladjustment (including behavioral disorders). It is necessary to:

- evaluate the student's involvement and contribution to the lesson;
- positively assess pro-social behavior;
- involve the student in group work and positively assess his/her cooperation with other students and fulfillment of assigned tasks;
- make it possible to work in small groups.

4. An outstandingly gifted student. It is necessary to:

- use methods and forms of work that meet the needs and interests of the student;
- create opportunities for participation in subject competitions and olympiads and interest circles;
- offer work with the project method;
- involve in preparing and conducting debates or school scientific sessions;
- assign additional tasks to be performed, in accordance with the talents of the student;
- suggest additional literature (e.g., specialized journals).

Ways to achieve the goals of education and upbringing in working with students with special educational needs - students with disabilities (including hearing and visual impairments, Asperger's syndrome and autism, motor disabilities), students with chronic diseases, ADHD.

1. Visually impaired student. It is necessary to:

- in the case of written works (tests, control works) prepare a set of tasks, instructions, questions written in appropriately larger letters, with greater contrast;
- prepare analytical material (tables, charts, maps) in an appropriately large format;
- reduce the number of tasks;
- do not assess the graphic level of the work;
- evaluate mainly oral statements;
- allow the use of a wide range of aids (optical, graphic, tactile);
- allow sitting in the first bench.

2. Hearing impaired student. You should:

- speak calmly, not too loud and fast, with appropriate volume of voice, address the student directly, tell about the activities and experiences performed;
- seat the student in the first bench;
- adjust the way of testing knowledge to the student's perceptual abilities;
- look at the student's face when asking a question;
- repeat instructions;
- write down more important and difficult information on the blackboard or a piece of paper;
- evaluate mainly written work;
- ignore errors due to hearing impairment when evaluating written work.

3. A student with Asperger's syndrome and autism. It is necessary to:

- do not change the student's place in the classroom, keep changes in the environment to a minimum, prepare the student for possible changes and use visualization of abstract concepts;
- limit auditory, olfactory, visual stimuli;
- encourage the student to work in a group, but do not force them;
- pose clear, unambiguous and specific questions, make sure the student listens and knows what to do;
- use activation techniques (e.g., memory maps, brainstorming);
- assess based on so-called positive reinforcement - praise, rewards;
- in grading, separate those areas where difficulties are due to disorders;
- adjust the assigned work to the capabilities of the student;
- limit the number of tasks.

4. A student with a mobility disability. It is necessary to:

- organize the space in the room to facilitate the student's mobility in a wheelchair;
- during field activities, excursions, prepare appropriate routes and support teacher supervision;
- if necessary, reduce the number of tasks.

5. A student with diabetes. It is necessary to:

- provide conditions for measuring sugar levels and taking insulin;
- provide the opportunity to eat a meal at any time, according to needs and medical recommendations;
- adapt the forms of testing knowledge to his current state of health.

6. A student with epilepsy. It is necessary to:

- ensure safety in the room in case of an illness attack;
- provide opportunities for rest after an illness attack or to prevent it;
- adapt the forms of knowledge testing to his current state of health.

7. A student with ADHD, emotional and behavioral disorders, motor hyperactivity and attention deficit disorder. It is necessary to:

- evaluate the merits of the work, not the student's behavior;
- use breaks during the test so that the student has a chance to relieve the tension associated with it;
- reduce the number of tasks;
- in view of labile mood or distraction, adjust the conditions for testing knowledge: a muted room, poor in distractions of all kinds;
- use clearly and simply formulated instructions, avoid instructions that are repeatedly complex.

II. INCLUSIVE EDUCATION

The Constitution of the Republic of Poland, the UN Convention on the Rights of the Child, the Convention on the Rights of Persons with Disabilities, and the Education Law guarantee all children the equal right to social inclusion and to freely express their views on matters relating to their own education and to have those views treated with due consideration. As a society, we have a responsibility to give everyone the opportunity for education and development that takes into account their personal talents and abilities.

In Poland, every year an increasing number of children need support in the educational process or special organization of learning. This requires rapid and wide-ranging action so that every Polish student can benefit from a high-quality educational system, and consequently be better prepared for an independent and satisfying life in adulthood and included in the mainstream of social, cultural and professional life. The Ministry of Education and Science has already undertaken work in 2017-2021 to prepare comprehensive solutions aimed at improving the quality of inclusive education, understood as quality education for all learners. The result of this work was the preparation in 2021 of proposals for the assumptions of legislative changes and a plan for their implementation.

New law

May 17, 2022. The President of the Republic of Poland signed a law on amendments to the Law on the Education System and other certain laws. The new regulations include solutions for, among other things, standardizing the employment of specialists in kindergartens and mainstream schools. The solutions in this regard will be introduced gradually from September 1, 2022 to September 1, 2024.

The new regulations will significantly improve access to assistance provided as early as possible and as close to the child as possible, in order to eliminate barriers that impede the child's development and learning. In addition, a very important task will be to improve the quality of education that takes into account the different educational needs of students at successive stages of learning. There is also a need for closer cooperation between ministries and more accurate addressing of funds for their implementation. The draft also takes into account demands related to improving the situation of children and adolescents who experience mental problems and are under psychiatric care.

The law in practice

On September 1, 2022, new standards for hiring teachers of pedagogues, special educators, psychologists, speech therapists and educational therapists in both mainstream and integrated kindergartens and schools will take effect. Another increase in the employment of specialists is planned from September 1, 2024. Ultimately, thanks to the introduced changes, the number of employed specialist teachers will increase from the current approximately 22,000 to 51,000, or by 143%.

Another element is the creation of the position of a special educator in kindergartens and mainstream and integrated schools, who will support teachers and implement specialized activities directly with students.

To expand access to specialized assistance in 2022 alone, an additional PLN 700 million has been allocated from the state budget, i.e. in addition to the educational subsidy, including PLN 180 million, which will allow the organization of 3 million hours of additional specialized classes, and PLN 520 million for the implementation of standards for the employment of

specialists in kindergartens and schools. Over the next 10 years, this will amount to PLN 25 billion.

In September this year, free diagnostic tools for assessing the cognitive, emotional-social and personality development of children and students, as well as materials for planning post-diagnostic support, will be made available in a specially developed information system developed by the Ministry of Education and Science and the Informatics Center for Education and Science.

For different needs and talents

In the 2021/2022 school year, 66,400 children under the age of 10 will be covered by early intervention, an increase of more than 500% in 13 years. Every third child attending a Polish school is covered by psychological and pedagogical assistance, and every tenth student has a mental disorder. Due to disabilities, 4% of students are covered by special education.

Inclusive education is an approach to the organization of the educational system and the process of education and upbringing, aimed at all students, not just those with learning difficulties. With inclusive schools, we create opportunities for children to function in a rich, diverse environment, which at the formative stage of personality enhances emotional development and builds many positive patterns and behaviors.

Children with different learning needs studying in the same classroom begin to recognize that people are different, with different needs and limitations. They learn to help others, but also to accept their limitations, to deal with failures, which are part and parcel of the learning process. An inclusive school is one that is sensitive to the needs of all students.

Priorities for inclusive education according to the Ministry of Education and Science:

- **Ensuring access to assistance** provided as early as possible to the child and family.
- **Improving the quality of teaching** (educational materials, new postgraduate courses for teachers financed by the Ministry of Education, funds for hiring specialists, psychologists, pedagogues and speech therapists in schools and for organizing additional specialized classes for students).
- **New way of assessing needs.**
- **Creation of various vocational training** pathways and support in entering the labor market for people with disabilities.

Teacher activities

In the activities of the teacher aimed at adapting the way of teaching to the needs of students, there must be no lack of the teacher's development of such a style that will make the implementation of the goals of education and upbringing more feasible for all students, which will improve the quality of school work. **The style of work of the teacher in accordance with the principles of inclusive education** is that:

- the teaching plan is created with all students in mind;
- lessons encourage students to attend;
- lessons teach students to understand diversity;
- students take an informed and active part in the learning process;
- students cooperate with each other during learning;
- the method of assessment (e.g., formative assessment) supports students in their pursuit of learning success;

- the source of order and peace in the classroom is the mutual respect that students and teachers have for each other;
- teachers show openness to cooperation: they plan lessons, conduct lessons and analyze lessons with regard to the implementation of the objectives and teaching methodology, as well as with regard to teachers' self-awareness (e.g., through the method of supervision);
- teachers are responsible for supporting the learning of all students in the classroom and encouraging their participation in lesson activities;
- educators and other specialists support teachers in diagnosing students' learning needs and their interactions in the didactic and educational areas;
- differentiated homework supports the learning process of all students in the class;
- all students participate in activities outside the classroom, such as joint outings;
- teachers are constantly expanding their knowledge of available resources and methods to support the teaching of a diverse class team.

III. EDUCATION SYSTEM IN POLAND 2021/2022



The Polish education system includes public and non-public education.

- public kindergartens, schools, establishments are run by the municipality/city/county and financed by the state and local government.
- non-public kindergartens, schools and establishments can be run by foundations, associations, individuals, companies; they have their own recruitment rules and are sometimes paid.

Nowy schemat systemu edukacji



Source: https://zskan.pl/?page_id=3997

Education reform

- Since the beginning of 2017, an education reform has been introduced, the main goal of which is to better prepare students completing the full cycle of education for individual development and the needs of the modern labor market, for which a solid foundation of general education is needed.
- The key elements of the reform are:
- Changing the structure of the educational system by introducing a long 8-class elementary school in place of a 6-year elementary school and a 3-year middle school
- Compulsory annual kindergarten preparation for 6-year-olds, during which the child learns basic skills, and his or her education, like

schooling, is covered by an educational subsidy from the state budget

- Provision of free textbooks
- Extending the cycle of general and vocational education in secondary schools (4-year general high school and 5-year technical school) by one year
- Introducing 3-year industry education (1 qualification in a given profession) with the possibility of acquiring further qualifications and preparing for matriculation in a 2-year industry school of the second degree
- Popularization of dual education implemented in cooperation with entrepreneurs
- Increasing the participation of employers in co-financing vocational education.

The changes began with the 2017/2018 school year.

The structural changes are being implemented on the basis of the Law of December 14, 2016. "Education Law" and on the basis of the Law "Regulations Introducing the Law - Education Law" of the same date.

The target school structure, as defined in the Education Law, includes:

- 8-year elementary school;
- 4-year general high school;
- 5-year technical school;
- 3-year industry school of the first degree;
- 2-year industry school of the second degree;
- 3-year special school adopting to work;
- post-secondary school.

The introduction of an industry lower secondary school, replacing the basic vocational school, took place as of September 1, 2017. The introduction of an industry upper secondary school for graduates of an industry lower secondary school took place as of the 2020/2021 school year.

Compulsory education

Compulsory education in Poland lasts 9 years and includes the last year of preschool education and 8 years of elementary school.

The Polish education system has separated compulsory schooling and compulsory education:

- Compulsory schooling (i.e., the obligation to attend an 8-year elementary school) applies to children and adolescents aged 7-15.
- Compulsory education refers to adolescents between the ages of 15 and 18 and can be carried out in school or out-of-school form (e.g., through vocational preparation with an employer).

STAGES OF EDUCATION

1. Early education and care

Facilities for children aged 0-3 years:

- nurseries
- children's clubs.

Nursery attendance is optional. Crèches are not part of the education system, but fall under the Ministry of Family and Social Policy.

Facilities for children aged 3-6:

- kindergartens,
- preschool departments in elementary schools,
- pre-school education complexes,
- kindergarten points.

Pre-school education is optional for children aged 3-5 and mandatory for 6-year-olds (annual kindergarten preparation). However, every 3-, 4- and 5-year-old has the right to use a place in a kindergarten in his municipality if his parents decide to use preschool care. Children 7 years old start compulsory education in the first grade of elementary school.

2. Primary education (ISCED 1+2)

The reform was the introduction of a unified structure covering ISCED 1 and ISCED 2 levels (elementary school + lower secondary school). This is an 8-year elementary school for students between the ages of 7 and 15.

Education in an 8-year elementary school includes two stages:

- grades 1-3 (early childhood education),
- grades 4-8 (teaching by subject).

At the end of grade 8 of elementary school there is a national external examination.

3. Secondary education (ISCED 3)

The vast majority of graduates of the former middle school and 8-grade elementary school continue their education in upper secondary general or vocational schools, although it is not compulsory (students are only subject to compulsory education).

The new types of secondary (post-secondary) schools for graduates of 8-year elementary school are:

- 4-year general secondary school
- 5-year technical school
- 3-year vocational school (first degree)
- 2-year vocational school (second degree) (in operation since September 2020).

General secondary school for youth

- General high school is a 4-year secondary school, where students are educated in accordance with the core curriculum of general education. This school prepares the student for the matriculation exam.
- A positive result of the baccalaureate exam (receiving a high school diploma) is necessary to begin higher education at a Polish university.
- A graduate of a general high school may enroll in a post-secondary school (it is not required to pass the matriculation exam and obtain a high school diploma).
- Graduation from a general high school gives a general secondary education, but does not give a specific profession.

Technical School

- The technical school is a 5-year secondary school, where students are trained in a selected profession of vocational education.
- After graduating from a technical school, students have professional qualifications, can take up a job; they also have the opportunity to pass the baccalaureate and go to college.
- Completion of a technical school gives secondary education in a trade, and thus gives qualifications for a specific profession.

- Students of the technical school take an external state examination conducted by the district examination commission during their education. After successfully passing the professional exams and graduating from the school, the graduate obtains the title of technician.
- At the technical school, the student learns general and vocational subjects.

Industry school of the first degree

- Education at an industry lower secondary school lasts 3 years and includes general and vocational education in accordance with the classification of occupations of industry education.
- Practical vocational education, so-called practical vocational training, may take place at school, at employers (as young workers), vocational training centers or continuing education centers.
- After graduation from an industry first-degree school and passing a vocational exam or journeyman's exam, the graduate will receive a vocational diploma or journeyman's certificate, respectively, and obtain an industry basic education.
- A graduate of an industry first-degree school, may take up employment or continue his education in an industry second-degree school or an adult high school.

Second-degree trade school

- The 2-year industry school of the second degree is intended for graduates of the industry school of the first degree, who have passed the vocational examination for the first qualification in the profession taught in the industry school of the second degree.

- Students take an external state examination conducted by the district examination commission. After successfully passing the vocational exam and graduating from the school, a graduate of an industry school of the second degree obtains the title of technician.
- A graduate of an industry second-degree school obtains an industry secondary education and can take the baccalaureate exam.

External exams

- Students of lower secondary and technical schools may, during their education or after graduation, take examinations confirming their qualifications in a given profession (old formula) or professional examinations (new formula) and obtain a diploma confirming their professional qualifications or a vocational diploma.
- Students of general high school and technical high school may, upon graduation, take the external matriculation exam. It enables them to obtain a high school diploma, and its possession is a prerequisite for admission to higher education. Such an opportunity is also available to students of a second-level trade school.

4. Post-secondary education

This stage of education is classified as secondary education in the Polish education system. Post-secondary schools are designed for people with general secondary education, and allow them to obtain a diploma confirming professional qualifications/vocational diploma after passing an exam. Post-secondary school education lasts from 1 to 2.5 years. Students of post-secondary schools take the same vocational examinations as students of basic vocational schools and technical schools.

5. Higher education

Educational programs are provided by two types of universities:

- academic universities
- vocational universities.

Both types of universities provide first- and second-cycle studies, as well as uniform master's degree programs, while only academic universities provide third-cycle (doctoral) studies and have the authority to grant doctoral degrees.

Studies can have two basic organizational forms: full-time and part-time.

The duration of the first degree program is:

- 3-4 years for a bachelor's degree
- 3.5 - 4 years for an engineering degree.

Holding a bachelor's or engineer's degree entitles the student to pursue a second degree. Second degree studies last from 1.5 to 2 years, depending on the field of study.

Studies in selected majors are conducted as a unified master's degree program, which lasts 4-6 years.

First- and second-cycle studies, as well as unified master's studies, end with a diploma exam, after passing which students receive a diploma of higher education.

Possession of a master's degree entitles the holder to practice the profession in question and allows admission to doctoral studies conducted at universities and scientific research institutions, lasting 3 to 4 years.

6. Adult education

The 4-year general high school for adults is intended for persons who have reached the age of 18 or are turning 18 in the calendar year in which they are admitted to the school. Education can be provided in full-time or part-time form.

This stage of education involves adults supplementing their primary and secondary school education, as well as obtaining and supplementing qualifications and skills for professional and personal purposes.

Education is provided in two forms (school and extracurricular) in:

- institutions for continuing and practical education
- in centers for further education and vocational training
- as part of postgraduate studies at universities.

There is also a separate system of training for the unemployed and certain categories of job seekers.

7. Special education

The basis for inclusion of a child/student in special care and education is an evaluation of the need for special education issued by a public psychological-pedagogical clinic.

- Special schools are organized for children and adolescents with an evaluation on the need for special education, such as: disabled, with mild, moderate or severe intellectual disabilities, deaf and hard of hearing, blind and visually impaired, with autism (including Asperger's syndrome).
- Education at a special lower secondary vocational school is provided for students with mild intellectual disabilities, socially maladjusted

and at risk of social maladjustment. Students with mild intellectual disabilities can also be educated in a general industry school.

8. Qualifying vocational course (QC)

- The qualifying vocational course is intended for people aged 18 and over, regardless of their level of education.
- The course curriculum takes into account the core curriculum of vocational education in the trade education.
- The participant of the course receives a certificate of completion of the course, and after passing the exam - a certificate of professional qualification issued by the district examination board.

USE OF ICT IN VOCATIONAL EDUCATION

Ministry of Education and Science: Vocational education and training action plan for 2022-2025

The Council of Ministers has adopted the Vocational Education and Training Action Plan for 2022-2025 developed by the Ministry of Education and Science, in cooperation with other ministries. The aim of the measures included in the document is to prepare workers for the needs of a modern economy. This is a continuation of the vocational education reform that began in 2019. The Action Plan takes into account the challenges facing vocational education resulting from economic changes, the development of new technologies and increasing digitization.

Key activities included in the Plan include:

- strengthening cooperation with employer representatives in the further development of vocational education in specific industries;

- ongoing adaptation of the offer and content of vocational education in cooperation with employers, resulting from technological changes and the challenges of digitization;
- increasing access to new professions for students with different types of disabilities;
- expanding the offer of marketable qualifications;
- establishing industry skill centers - centers for education, training and examination in specific industries;
- preparing more multimedia materials for vocational education using new technologies;
- increasing the use of new technologies during vocational exams;
- adopting additional solutions for the possibility of flexible employment of specialists from the market in schools;
- increasing access to industry training implemented at employers for current vocational teachers;
- promotion of the best vocational education teachers and their inclusion in activities disseminating innovations in vocational education;
- launching an Internet portal presenting available professions and facilitating cooperation between schools and employers;
- organization of a European skills competition - EuroSkills in 2023;
- increasing the participation of provincial governments in activities aimed at developing vocational education and implementing the Integrated Skills Strategy at the regional level.

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Law of May 12, 2022 on amendments to the Law on the Education System and certain other laws (Journal of Laws, item 1116)

Act of December 14, 2016. Education Law

Regulation of the Minister of National Education of August 9, 2017 on the principles of organizing and providing psychological and pedagogical assistance in public kindergartens, schools and institutions

Regulation of the Minister of National Education on the detailed conditions and manner of assessing, classifying and promoting students and listeners in public schools.

Regulation of the Minister of National Education of August 28, 2017 amending the Regulation on the principles for providing and organizing psychological and pedagogical assistance in public kindergartens, schools and institutions (Journal of Laws of 2017, item 1643);

Regulation of the Minister of National Education of August 9, 2017 on the principles of organizing and providing psychological and pedagogical assistance in public kindergartens, schools and institutions (Journal of Laws of 2017, item 1591);

Regulation of the Minister of National Education of August 28, 2017 amending the Regulation on the conditions for organizing education, upbringing and care for children and youth with disabilities, socially maladjusted and at risk of social maladjustment (Journal of Laws of 2017, item 1652);

Regulation of the Minister of National Education dated August 9, 2017 on the conditions for organizing education, upbringing and care for children and youth with disabilities, socially maladjusted and at risk of social maladjustment (Journal of Laws of 2017, item 1578);

Ordinance of the Minister of National Education dated August 28, 2017, amending the Ordinance on individual compulsory annual preschool preparation of children and individual teaching of children and youth (Journal of Laws of 2017, item 1656);

Regulation of the Minister of National Education of August 9, 2017 on individual compulsory annual preschool preparation of children and individual teaching of children and adolescents (Journal of Laws of 2017, item 1616);

Regulation of the Minister of National Education dated March 17, 2017 on the detailed organization of public schools and public kindergartens (Journal of Laws of 2017, item 649);

Regulation of the Minister of National Education of March 28, 2017 on framework educational plans for public schools (Journal of Laws of 2017, item 703);

Regulation of the Minister of National Education of August 25, 2017 on the manner in which public kindergartens, schools and institutions keep records of the course of teaching, educational and caring activities, as well as the types of such records (Journal of Laws of 2017, item 1646);

Ordinance of the Minister of National Education dated August 25, 2017, amending the Ordinance on detailed conditions and manner of assessing, classifying and promoting students and listeners in public schools (Journal of Laws of 2017, item 1651);

Regulation of the Minister of National Education of August 3, 2017 on the evaluation, classification and promotion of students and listeners in public schools (Journal of Laws of 2017, item 1534);

Regulation of the Minister of National Education of February 14, 2017 on the core curriculum for kindergarten education and the core curriculum for general education for elementary school, including for students with moderate or severe intellectual disabilities, general education for an industrial school of the first degree, general education for a special school for special education and general education for a post-secondary school (Journal of Laws of 2017, item 356);

Regulation of the Minister of National Education of August 27, 2012 on the core curriculum for preschool education and general education in particular types of schools (Journal of Laws of 2012, item 977, as amended).

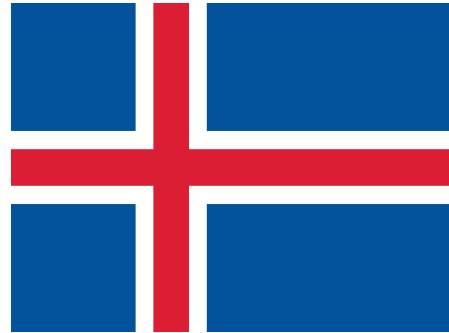
Regulation of the Minister of National Education of August 24, 2017 on the organization of early childhood development support (Journal of Laws of 2017, item 1635);

Development of materials:

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IV. THE EDUCATION SYSTEM IN ICELAND



1. General statistics

When looking at systems in Iceland it is important to keep in mind that Iceland has few inhabitants and has the lowest population density in all European countries, only 3 persons/km. According to Statistics Iceland the population of Iceland at the end of the 2nd quarter 2022 was 381,370, 195,990 males, 185,290 females and 100 non-binary/other. The population increased by 4,090 from the previous quarter. Inhabitants of the capital region were 243,550 and 137,820 lived in other regions. A total of 1,070 children were born in the 2nd quarter and 640 persons died. Net migration of persons with Icelandic citizenship was 90, and 3,510 for foreign citizens. More males than females emigrated.

Immigrants are increasing part of the population and since 2012 the number has increased from 8.0% of the population to 15.6%. Immigrants from Poland are by far the most populous group of immigrants in Iceland – 5,8% of population in Iceland are Polish citizens (Statistics Iceland, August 8th, 2022).

Icelandic labour market has improved somewhat from the previous year. The labour force participation at the 2nd quarter of 2022 was 81,6%, employment rate 78,1%, and unemployment in July was 3,2% (activity rate

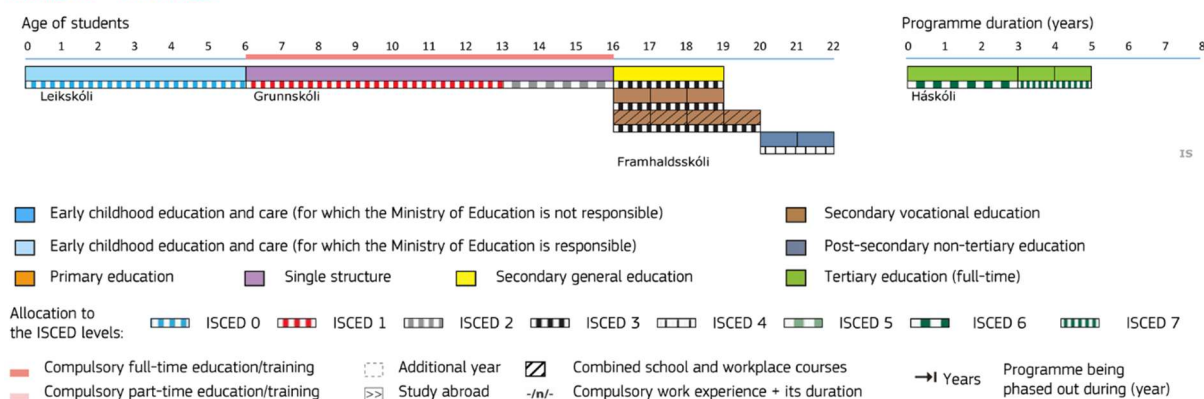
16-74 years). Immigrants (age 20-59) made up 22.3% of the total Icelandic labour force and the number has never been higher (was 7% in 2005)

2. The Icelandic Education System and its Qualifications

The education system in Iceland is divided into four levels: pre-primary education, compulsory, upper-secondary and higher education.

Levels of education system

Iceland – 2020/21



The Icelandic Education system. Source: <https://www.government.is/topics/education/>

Pre-primary school education (leikskóli) is defined by law as the first level of the education system providing education and care for children up to six years of age, at which point compulsory education begins. Children’s interests and welfare shall be the primary mission of all preschool activities. Children shall be provided with care and education, offered a healthy and encouraging environment to grow up in, as well as safe conditions to learn and play. Learning through play shall be encouraged in a creative environment where children enjoy a variety of possibilities to grow. The Pre-primary Schools Act No 90/2008.

Compulsory education (grunnskóli) is organised in a single structure system - primary and lower secondary education form part of the same school level (generally take place in the same school). The duration of

compulsory schooling is generally ten years but may be shortened in accordance with Article 32. School attendance is mandatory for all children, in general between the ages of six and 16. The role of compulsory schools is to cooperate with homes in promoting the all-round development of all pupils and their participation in a democratic society in constant development. The manner of operation of compulsory schools shall be characterised by tolerance and charity, guided by the Christian heritage of Icelandic culture and marked by equality, democratic cooperation, responsibility, consideration, forgiveness and respect for human worth. Compulsory schools shall also seek to organise their work in a way that corresponds as fully as possible with the circumstances and needs of pupils, and to promote the all-round development, well-being and education of each individual. The Compulsory School Act No 91/2008.

Upper secondary education (framhaldsskóli) is not compulsory but anyone who has completed compulsory education has the right to enter an upper secondary school. Students are usually between 16 and 20 years of age. Studies at the upper secondary level are organised as a continuation of compulsory school education. The role of upper secondary schools is to promote the all-round development of all students and their active participation in democratic society by offering studies suiting the needs of each student.

The studies conclude with a final examination such as the upper secondary school leaving certificate, a professional qualification examination, the matriculation examination, or any other formal conclusion of studies, linked to specific occupations and granting special rights in relation thereto. Students at upper secondary schools can complete their studies in study programmes that are defined at different qualification levels and upper secondary schools issue certificates to certify learning

outcomes at each level. The aim is to ensure that everyone can leave upper secondary school with at least some qualification, regardless of e.g., learning disabilities. Additionally, students can go on to further studies if they have completed the first three levels of the upper secondary school. VET students, however, need to complement their studies with academic subjects if they wish to enter studies at university level. Some schools provide their students with the opportunity to complete matriculation examination alongside their VET studies.

- General academic education is primarily organised as a three-year course leading to a matriculation examination.
- Vocational education – the length of the courses varies, lasting from one semester to ten, but most prevalent are three-year courses.

The Upper Secondary School Act No 92/2008.

Higher education (háskóli) - education at tertiary level, in line with the Bologna process offering three-year bachelor, two-year master and three-year PhD programmes. The first higher education cycle includes two stages, Diploma, and bachelor's degree. The modern Icelandic system of higher education dates to the foundation of the University of Iceland in 1911. The legal framework covering higher education in Iceland is The Higher Education Act No 63/2006. The acts apply to institutions providing higher education leading to a degree and which have been accredited by the Ministry of Education, Science and Culture.

Since May 2020 the entry level to higher education is on ISQF 3 (EQF 4) which includes VET graduates
(<https://www.althingi.is/altext/151/s/1354.html>).

All higher education institutions in Iceland, accredited by the Minister of Education, Science and Culture shall follow The National Qualification

Framework for higher education in Iceland (ISQFHE) - a systematic description of the structure of qualifications and degrees at the higher education level and is specifically based on learning outcomes. ISQFHE was issued 2007 and revised in 2010.

The Minister of Education, Science and Culture grants accreditation to Higher Education Institutions that fulfil the criteria laid down in national legislation as well as internationally accepted criteria. Accreditation is also field based, with each institution being limited to teaching and research in those fields and subfields of academia in which they are accredited.

Further information:

- o Criteria for Accreditation of Higher Education Institutions in Iceland
<https://www.stjornarradid.is/library/04-Raduneytin/Haskola---idnadar--og-nyskopunarraduneytid/Criteria%20for%20Accreditation%20of%20Higher%20Education%20Institutions.pdf>

- o The Icelandic Quality Enhancement Framework (QEF)
<https://qef.is/quality-enhancement-framework/>

There are currently seven higher education institutions in Iceland, of which four are public and three are private.

Legislative Framework and funding

The Icelandic parliament bears political and legal responsibility for the school system. The Ministry of Education, Science and Culture is responsible for the implementation of legislation concerning all school levels, as well as continuing and adult education. This involves preparing educational policies, including national curriculum guides for schools at the pre-primary, compulsory and upper secondary levels, issuing regulations and planning educational reforms.

The overall legislation governing the Icelandic education system has undertaken complete revision over the years 2006 – 2010 with the policy of lifelong learning behind it, in which the whole education system is seen as a whole from pre-school to university and adult education.

2006 - The Act on Higher Education Institutions no. 63/2006

2008 - The Preschool Act no. 90/2008; The Compulsory School Act no. 91/2008; The Upper Secondary School Act no. 92/2008 and The Act on Education and Recruitment of Teachers and Head Teachers in Pre-School, Compulsory School and Upper Secondary School Act no. 87/2008; The Act on Public Higher Education Institutions no. 85/2008

2010 - The Adult Education Act no. 27/2010

On the basis of new legislation, a National Curriculum Guide was issued in May 2011. It provides a detailed framework for school activities at pre-primary, compulsory and upper secondary levels and guides through their objectives and goals. Six fundamental pillars have been defined within this framework forming the essence of the educational policy in Iceland. These six pillars are: “health and wellbeing”, “literacy”, “sustainability”, “democracy and human rights”, “equality” and “creativity”.

Pre-primary and compulsory education institutions are the responsibility of municipalities. Central government is responsible for the operation of upper secondary schools and higher education institutions. Education in Iceland has traditionally been funded by the state, but there are a few private institutions in operation today at the pre-primary, upper-secondary and higher education levels. Adult education is provided by public institutions, private institutions, businesses, and organisations.

The Icelandic Qualification Framework (ISQF)

In parallel to the revision of the Icelandic education system and development of new curricula The Icelandic Qualification Framework (ISQF) was developed as an integral part of the new legislation and curricula. The ISQF includes 7 levels, ranging from secondary education through attainment of the doctorate. The qualifications of the ISQF levels show gradually increased demand on the pupils' knowledge, skills, and competences, leading to greater specialisation and professionalism. There is an overlap of qualifications between education levels- the lower levels pertaining to the upper secondary level can overlap with the compulsory school level at one end (ISQF level 1) and the highest level can overlap with the university level at the other end (ISQF level 4).

Icelandic education system and the qualification levels and standards which have been defined within it, align with the European qualification framework so that the first Icelandic qualification level is comparable to both the first and second European qualification level and following labels as shown in the table below:

Icelandic Qualification Framework



Icelandic Qualification Framework (ISQF)	Descriptors of the Icelandic Qualification Framework	Examples of qualifications	European Qualification Framework (EQF)
7	<ul style="list-style-type: none"> Has advanced knowledge of theories, research and the latest developments in a scientific field. Can conduct and manage research with confidence in order to develop new knowledge. Can work independently, show initiative and be responsible for complex theoretical tasks and pass on knowledge to others. 	Doctoral degree	8
6.2	<ul style="list-style-type: none"> Has obtained knowledge through research and has a good understanding of theoretical challenges and arguments and is able to contextualise the latest knowledge. Can understand complex problems and use appropriate methods to conduct smaller research projects. Can initiate and lead new projects, evaluate the most suitable approaches, and be responsible for their own work and that of a team. 	Master's degree	7
6.1	<ul style="list-style-type: none"> Has knowledge and understanding of theoretical challenges and arguments and is able to contextualise the latest knowledge. Can apply the methods of the relevant field/profession to formulate, develop and solve problems. Can initiate and lead new projects and be responsible for their own work and that of a team. 	Qualification at master's level	
5.2	<ul style="list-style-type: none"> Has an understanding of and insight into major theoretical concepts and theories and is familiar with the latest knowledge within a specific field. Can apply critical theoretical and/or professional analysis when solving problems and evaluate the results independently. Can work independently in an organised manner, make and carry out plans and supervise teamwork. 	Bachelor's degree	6
5.1	<ul style="list-style-type: none"> Has knowledge of selected theories and theoretical concepts and has insights into the relevant field in a broader context. Can develop and manage projects using the techniques relevant to the field/profession. Can show initiative and work independently in addition to solving problems as part of a team. 	Diploma	
4	<ul style="list-style-type: none"> Has specialised knowledge useful for supervision and management in a specific field of work and/or further studies. Can organise work procedures, apply the appropriate techniques and develop working methods in a responsible way. Can give guidance and professional training, review own and others' performance and be responsible for the utilisation of the relevant occupation in cross-disciplinary cooperation. 	Additional education at upper secondary school (a)	5
3	<ul style="list-style-type: none"> Has specialised knowledge in a specific field of work and/or as a preparation for further studies. Can demonstrate professionalism, show initiative, organise tasks and evaluate own work. Can make use of specialised knowledge for improvements, give professional advice and co-operate in cross-disciplinary activities. 	Matriculation examination, vocational examination for professional rights (a), other final examinations (a), access to higher studies	4
2	<ul style="list-style-type: none"> Has basic knowledge of work procedures and concepts useful in work and/or study. Can solve problems by applying the appropriate work methods, tools and information. Can work as a part of a team, initiate interaction and be responsible for well-defined tasks. 	Upper secondary school leaving examination, vocational examination for professional rights (a), other final examinations (a)	3
1	<ul style="list-style-type: none"> Has the basic knowledge for work and/or as a preparation for further studies. Has the basic skills required to carry out simple tasks during studies and/or at work. Can work under guidance with some independence on well-defined tasks. 	Upper secondary school leaving examination, other final examinations (a), completion of compulsory school	1 and 2

Examples: a) Master craftsman. b) Carpenter, assistant nurse. c) Horticulturist, technical designer. d) Marine engineer grade A. e) Leisure assistant, meat cutter. f) School assistant.

Icelandic Qualification Framework. Source: <https://mms.is/islenski-haefniramminn-a-ensku>

3. Vocational education and training (VET) and Adult Learning

The Icelandic vocational education and training (VET) system originates from the time when Iceland was still part of the Danish kingdom. At that time apprentices learned from their masters by working alongside them. Gradually, schools took over parts of the training and more theoretical subjects were added. Workplace learning is still important, and the journeyman's exam is centred on demonstrating skills learners have acquired. VET in Iceland is generally organized as a dual system at the upper secondary level (ISQF 3/ EQF4), where studies at school and workplace learning form an integral part. Almost all initial VET is in certified trades and built on an apprentice system. Most of the education takes place in school, but workplace training is also necessary. In addition, there are a small number of VET programmes where all the education and training take place in school and are not certified trades, such as in computer technology and various arts.

Revision of workplace learning has taken place in August 2021. The new Regulation on workplace learning 180/2021 covers workplace learning at secondary school level. It is based on the general provisions of the main curriculum on learning at the workplace and Act on secondary schools no. 92/2008. The regulation stipulates that secondary schools supervise students in workplace studies. They keep a record of the number of students who are in workplace studies at any given time. **Secondary schools are responsible for drawing up and confirming work-based learning contracts and supervise them.** They have in their hands the annulment of the same contracts if it comes to that. In some branches it is difficult for students to get the workplace training, and then they can get this training at school. Before this path is taken, the school must have fully

tried to get the student on a master's contract and report this to the master's association of the relevant trade.

The duration of on-the-job training with a master craftsman/company/institution is determined by the student's ability, but the ability aspects of the job are kept track of in a digital logbook. Workplace training is considered completed when the student has, in the opinion of the master of trades/company/institution and the school supervisor, achieved all the competency components and thereby the required competency. Work-based learning can therefore vary in length for students, but never longer than the organized study requires.

DUAL vocational education training

• School-based education and training

School time is usually divided into a basic part (grunnám), which is common for several studies in similar sector (metal, construction, etc) and specialisation (sérnám) in a number of trades. The duration of programmes can be between one semester (4 months) and 3 years.

• Work-based training

Practical training (starfsþjálfun) or **apprenticeship** (samningsbundið iðnnám) is a regulated part of certified training. **A training contract is usually signed between the trainee and a master craftsman.** The length of the training period varies from 4 – 36 months according to the structure of the VET-programme in question. During that time the trainee is supposed to carry out a broad range of tasks introducing him or her to all the most common subjects of the trade. Employers have pointed out that for many companies it is difficult if not impossible to make apprenticeship agreements due to their small size and the limited scope of the work they carry out. They point out that in some branches of industry

only a small proportion of companies is involved in apprenticeship training, even though they cannot be certain of how long the fully trained person will work for them. Other companies do not provide training but nevertheless have access to fully trained personnel.

Enterprises responsible for training need official certification and training agreements with both the learner and the school, stipulating the objectives, time period and evaluation of the training. Most learners in workplace training receive salaries, at an increasing percentage of fully qualified workers' salaries. **Companies training learners can apply to the Ministry of Education, Science and Culture for a subsidy to fund training.**

According to Elsa Eiríksdóttir (2018) there are considerable variations in the way the dual system is implemented among the certified trades which suggests independence in development and a lack of centralized governance in the VET system in Iceland.

Main features of VET in Iceland:

The overall emphasis of the education system is to keep its structure simple and understandable, so learners can move relatively easily between study programmes. They can finish upper secondary school with a vocational and a general degree (matriculation exam), the prerequisite for higher education. VET learners who have not passed the matriculation exam can attend further general education to qualify.

Study programmes vary in length from one school year to four years of combined school and workplace learning. The duration of the time spent in school and the time spent at the workplace varies between programmes and branches. The most common duration of VET studies in certified trades is four years.

Learners with severe learning difficulties are offered special programmes at mainstream upper secondary schools. Several VET pathways leading to a diploma give these students the potential to continue their education.

Several qualifications are offered at upper secondary level; some of these are preconditions for holding relevant jobs. The most common are journeyman's exams but there are also exams for healthcare professionals and captains and engineers of ships and planes. In other professions, a VET degree is not a precondition for employment, but graduates enjoy preferential treatment for the jobs they are trained for. Learners can finish upper secondary school with a vocational and a general degree (matriculation certificate).

A few VET programmes are available at post-secondary non-tertiary level (ISQF 4/EQF 5), including tourist guides and captains at the highest level. VET at post-secondary non-tertiary level is mostly composed of master of crafts' programmes where a journeyman's certificate (in the relevant study programme such as electrical, building or mechanical studies) is a prerequisite for enrolment. These programmes last one to two years and lead to qualifications giving professional rights.

Certified tradesmen (with a journeyman's examination) can also enter (90 ECTS) diploma studies in construction, mechanical or electrical engineering at tertiary level, earning them the professional title of a certified technician.

Holding a VET qualification is highly valued by the labour market. However, a certificate is legally necessary only for certified trades such as electricians, masons, builders, plumbers etc.

Social partners play an important role in shaping VET policies.

The Upper Secondary Act of 2008 called for VET programmes that better respond to labour market skill needs. The act, as well as the Icelandic national curriculum guide for upper secondary schools, provides, since 2011, for a decentralised approach in designing study programmes and curricula. Upper secondary schools are entrusted with great responsibility and enjoy autonomy in developing study programmes both in general education and VET, combining learning outcomes, workload and credits. Focus is on flexible schedule, in the balance between general subjects and occupational specific skills and can vary between different VET programmes. However, learning pathways must be accredited by the Directorate of Education on behalf of the education ministry. Upper secondary schools need to submit descriptions of new study programmes to the education ministry. Approved programmes become part of the national curriculum guide. When formulating ideas for new study programmes, schools cooperate closely with occupation councils, which form the link between the ministry and the labour market. Courses which give study points at upper secondary schools must be approved by an official validation body, according to standards approved by the education ministry.

Continuing VET (CVET) programmes are available for adults and are usually offered by:

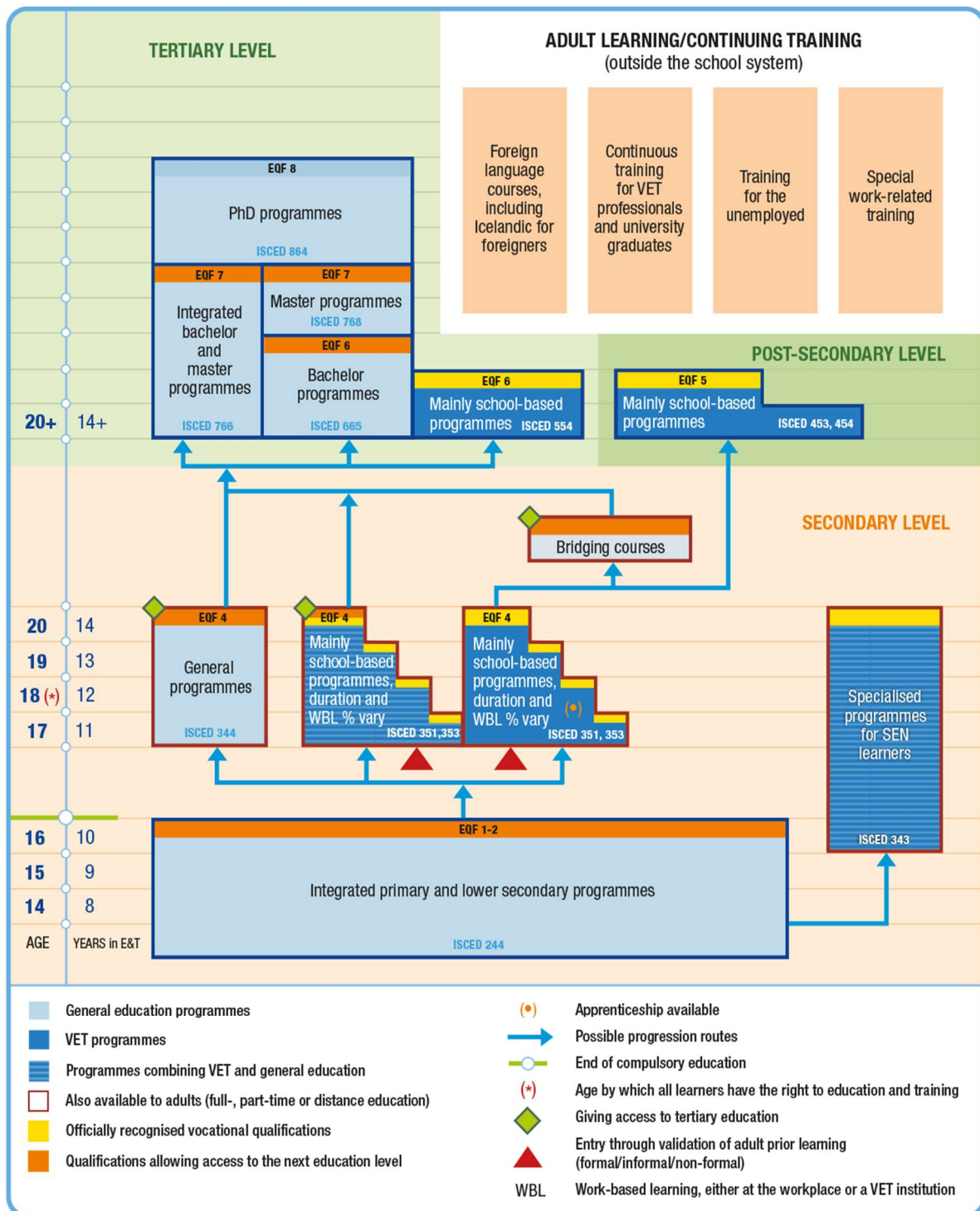
- Institutions owned by social partners. Courses offered are aimed at upgrading skills. These courses are usually of short duration. People in the labour market with VET qualifications can get financial support from the social partners' training funds for these courses.
- Other continuing VET centres which are much smaller than the social partners' institutions and offer more specialised training.

- Workplace training is also offered to employees mainly on security, environmental protection, new working techniques, etc.

Almost two-thirds (63.9%) of those who choose VET are males, dominating many of the most popular study programmes, such as for various electrical, building, and mechanical studies. **Females, on the other hand, dominate popular study programmes such as for social service and health care assistants, as well as hair styling and cosmetology.**

The participation rate of young people in VET aged 15 to 24 is among the lowest in Europe at 23.8%. Looking at all upper secondary learners, however, the proportion is around 30% vis-à-vis general studies, reflecting the higher average age of VET learners, many of whom had enrolled in general studies before switching to VET programmes.

In 2016, the dropout rate from VET was a staggering 37.5%. No doubt a part of this group will return and finish their study programmes at some point, as the average graduation age in VET is around 27 years old.



NB: ISCED-P 2011.
Source: Cedefop and ReferNet Iceland, 2019.

Vocational education and training system chart. <https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/iceland-2019>

Adult education in Iceland – one of the highest lifelong learning participations in Europe

Adult education is defined in the Adult Education Act No. 27/2010, the framework legislation on adult education, as “Any education, measure or counselling provided for the purpose of meeting the needs of persons with limited formal education.”

Adult Education Act addresses accreditation, funding, and the validation of non-formal and informal learning with the objective of increasing study completion rates and raising the overall education level of the nation.

Iceland has one of the highest participation rates in education and training among 25- to 64-year-olds in Europe - 23,9% in 2021.

There are no specific schools for adults in the formal school system and therefore attend secondary schools, day classes or evening classes. For general studies the regular (daytime) upper secondary school programmes are available for learners up to 25 years of age, but that limit does not apply to VET.

Adult education is provided by public authorities, private institutions, companies and organisations, institutions at the upper secondary and higher education levels, including lifelong learning centres.

Educational Fund provides for a state budget funding financing education and training courses, guidance and counselling, and validation provided by accredited educational providers. The fund is administrated by the Education and Training Service Centre (ETSC). Educational and training centres located around Iceland operate under the guidance of ETSC - a leading actor in analysing, validating, and increasing competence in working life. The ETSC serves as a forum for cooperation between the Ministry of Finance, the Icelandic Federation of Labour (ASI), SA-

Confederation of Icelandic Employers (SA), Confederation of State and Municipal Employees of Iceland (BSRB), and the Association of Municipalities in Iceland (SÍS).

There are 11 lifelong learning centres, training centres owned and operated by social partners for skilled workers in certain trades, and in numerous private training institutions. Two of these institutions are owned by employer and employee organisations and offer professional continuing development courses for qualified journeymen and masters of trades. As for the healthcare sector, continues development courses are offered mainly by universities.

Three aspects of basic adult education are: study and vocational counselling, validation of prior learning and accreditation of study programmes. The aim of validation of prior learning and accredited study programmes is validating and recognizing professional experience and opening routes to secondary-level education, bridging programmes for Higher Education studies or the labour market.

o **Educational and vocational counselling** is, by law, part of school specialist services. Students in elementary and secondary schools have the right to benefit from educational and vocational counselling by persons who meet the requirements of the Act on Study and Career Counselling. The services of educational and vocational counsellors are also available at universities as well as at continuing educational and training centres throughout the country.

Good practice example: The adult education centres offer vocational and educational counselling free of charge. Example of various study and career advice services offered by Idan's Vocational Education and Training Centre counsellors:

- One-on-one interviews.
- CV writing and career development.
- Validation of prior learning - support and work closely with individuals during the validation process.
- Counselling on study and career choices.
- Counselling on test anxiety, stress and self-empowerment.
- Interest analysis – special interest inventory test.
- Aid students who have special needs during journeyman's examination.
- Company visits offering Idan's services.
- Counselling for unemployed (Icelanders and immigrants) in cooperation with Directorate of Labour.

o **Validation of Non-formal and Informal Learning**

Validation of non-formal and informal learning is a confirmation and validation of competence regardless of how or where an individual has acquired it. It's a process in which knowledge, skills and competences acquired through non-formal and informal learning are given visibility and value. It allows individuals who have acquired some skills (e.g., at workplaces) to identify, document, assess and certify their skills. This may shorten their study periods towards a journeyman's examination in a trade, e.g. They also get valuable assistance (counselling and study aid) if they have learning problems. By receiving recognition of their competences, individuals can continue their education based on their competence level or enhance job development at work.

The Education and Training Service Centre (ETSC) is the leading actor in validating non-formal education in Iceland based on service agreement made in 2002 with the Icelandic education authorities. ETSC is responsible for issuing curricula for non-formal training and for developing methods of quality assurance of recognition of non-formal and informal learning based on quality criteria established by the European Qualifications Framework. ETSC provides counselling on continuing projects and is actively involved in initiating validation in new sectors.

The steps of validation process:

- Information and feedback.
- Documentation (portfolio and the check list for the module based on the module description and qualification requirements).
- Analyses – an interview with the assessor.
- Confirmation.
- Validation and recognition of competence (official documentation).

It is important that counsellor takes part in the process, guides the individual on how to identify and document acquired competence, assists, and supports through the whole process. Counsellor should be an educational- and vocational counsellor, or someone trained in the methodology of validation. Assessor should be a professional in the relevant field, trained in the methodology of validation.

The final validation and recognition are in the hands of various stakeholders, for example schools, education providers and companies.

o **Recognition of Professional Qualifications**

Individuals who have studied abroad have the possibility of having their qualifications recognized in Iceland. If the purpose of recognition is to prepare for further studies or to compare qualification levels, an application should be sent to the relevant education institution or to the ENIC/NARIC network in Iceland. If the purpose of recognition is to acquire rights to work within a regulated profession in Iceland, the applicant must apply to the appropriate competent authority in this country. Applicants for an evaluation and recognition of a professional qualification in industry-related profession should direct their enquiries to RAFMENNT Electrical VET Centre if it is a qualification in electricity or electronics or to Ídan Vocational and Education Training Centre if it is any other industry-related degree.

The University of Iceland operates an ENIC/NARIC office based on an agreement with the Ministry of Education, Science and Culture. The ENIC/NARIC office oversees academic recognition of qualifications.

The Icelandic Centre for Research operates an Europass office based on an agreement with the Ministry of Education, Science and Culture. The aim of the Europass office is to make it easier for people to make their skills and competences visible and qualifications more readable. Further information on recognition of professional qualifications can be found on the Europass website.

Legislation:

- Act on the Recognition of Professional Qualifications no. 26/2010
- Regulation on the recognition of professional qualifications for working in Iceland no. 477/2020

The labour market is committed to continuous professional development and support lifelong learning. Good practice example: Just over 20 years ago the collective labour agreements reached an agreement to establish a specific training funds for employees; this is done through collective agreements and both employees and employers pay a certain percentage into these funds. Thus, both parties can apply for funding towards training. The fund is called Áttin and approx. 120.000 individuals can benefit from this fund, or about 75% of the private labour market.

Companies and educators can apply for grants from the Ministry of Education for courses in Icelandic for their foreign workers. The courses are not part of general education at primary- and secondary-school levels. (<https://island.is/en/lifelong-learning>)

Student composition in secondary schools in Iceland

In October 2020 a total of 22,644 students were enrolled in to 34 secondary schools in Iceland. A total of 8660 new students enrolled in the autumn 2020 of which 4225 were students completing primary school and 4435 were others entering the Icelandic school system at different ages.

Out of all the students enrolled in the Icelandic upper secondary system in 2021, a total of 521 students are enrolled with special needs. These needs are diverse, from non- Icelandic speaking students and students with physical and/or mental challenges.

Adult education for challenged individuals

There is one lifelong training centre that specialises in courses and different learning solutions for adult (20+) people with disabilities, Fjölmennt. Their main educational offers are life skills, ICT and individual

empowerment. Around 400 persons attend their course per year.



Source: <https://bit.ly/3pu722f>

4. Inclusive education in VET

Inclusive education – Education for All – is the guiding policy for Iceland’s national education system from early years to the transition period. This means addressing and responding to all learners’ learning needs without treating or defining those in need of special support any differently from other learners. In accordance with this, the legislation for the four educational levels includes all learners. In short, Education for All means that:

- **All learners have equal opportunities to attend school and acquire education in accordance with their ability and needs.**
- **Schools must attend to the abilities and needs of all learners.**
- **Learners and/or their parents decide on which school they attend.**
- **All learners have the right to the support and provision that they need.**

Support and guidance

An increasing percentage of those who complete compulsory schooling continue their studies at the upper-secondary level. During the last decade, this has increased from about 80% to approximately 93% of each year class. There is considerable drop-out in upper secondary school, more among first year students with immigrant background compared to students with an Icelandic background. The dropout rate has been decreasing since 2003. In recent years, several ways have been sought to reduce the drop-out rate, among other things with strengthened educational counselling and more varied course offerings. Several upper secondary schools offer full year remedial instruction. This instruction is especially intended as preparation for upper secondary school studies and for pupils with very poor preparation for enrolment in upper secondary school programmes. In mainstream classes at upper secondary schools, pupils with disabilities and immigrant students are assisted with their studies, by for example in sign language or Icelandic as a second language. Educational and vocational counsellors assist with pupils' learning and personal problems. **Students with learning difficulties can apply for adjustment of examination procedures such as extended exam time, reading and writing assistance, separate examination room, coloured paper, larger letters.**

Example of assistance in studies offered in Technical College (Tækniskólinn):

The Technical College in Reykjavík places great emphasis on providing students with the assistance they need to perform to the best of their abilities. The service is diverse and covers, among other things, assistance in studies, special education, supervisory teachers support,

study counselling, psychological counselling, prevention, and assistance in social matters.

- o **Study counselling** - The role of educational- and vocational counsellors is to protect the well-being of all students, support them in matters related to studies, school stay, further studies, and career choices. They also provide advice to teachers.

- o **Longer exam time** - students who struggle with reading difficulties or other learning difficulties are entitled to an additional 30 minutes when solving assessment components. Special teachers and educational counsellors accept data for special needs.

- o **Study Lab** (Námsver) – its role is to provide students support and assistance if they have any type of study difficulties. In the Study Lab students can get help with taking tests and support with homework, general assistance in foundation subjects and assistance when working on projects or writing essays.

- o **The writing Lab** (Ritver) offers help with thesis writing, home source searches and home source listings. In addition, assistance is offered in the preparation of a cover letter and resume. Students can also get help with simple WordPress website design, for example for portfolio pages.

- o Every semester extra classes and assistance are available in many courses.

The municipalities are responsible for pre - primary and compulsory education and the state is responsible for secondary and tertiary education in Iceland. However, the state is responsible for the implementation of all legislation pertaining to all school levels in Iceland.

Much work is done in regards with matters concerning inclusion in the municipalities, and is firmly embedded in laws, regulations, and curricula.

Even though this report is focusing on the secondary school level, it is important to realise that students are coming from a uniformed system run by the municipalities to a more complex upper secondary school system with a diverse entry and exit points. Laws and regulation for each school stage stipulate the specifics in terms of education for disabled students and what support and services they should receive.

In the Education Act for primary schools from 2008 nr.91, article 17 it is stated that all children with special needs should be assisted in every possible way. The definition of an inclusive school refers to a primary school in the local area or surrounding area of students where the academic and social needs of students are met in general schoolwork guided by human dignity, democracy, and social justice. In the Curriculum for primary schools, it is also stated that inclusive education is a continuous process which aims to offer quality education for all. Respective of diversity and different needs, abilities, and characteristics of students. Teachers' emphasis shall be placed on eliminating all forms of discrimination and segregation in schools.

The educational system at upper secondary level is fragmented compared to the compulsory level. The secondary act 320/286 from 2008 gives upper secondary schools freedom to run their schools, thus deregulating them. However, they are obligated to offer an inclusive learning environment giving students with disabilities or any other challenges the right to study alongside other students as much as possible. The Minister of Education can authorize, in an agreement with secondary schools, the operation of special courses at secondary schools for students with disabilities and students with literacy restrictions shall have access to tailored learning materials as appropriate, example of access to audio books. Regulation for students with special needs in secondary schools 230/2012 refers to

inclusion and refers to the learning environment, where educational and social needs of students should be met with humanity, democracy, and social justice. This applies to students with special needs such as learning difficulties, emotional or social difficulties and/or disabilities, students with literacy inhibition, chronically ill students, students with developmental disorders and mental disorders, and other students with health-related special needs.

The secondary schools in Iceland have in some instances specialised their services depending on the different challenges students face. The general rule as mentioned before is that students with disabilities should study with other students as much as possible. However, this is not always possible and therefore for most secondary schools offer educational programmes called starfsbraut (e. basic vocational program). The program lasts 3-4 years and is mainly on level 1 of the Icelandic qualification framework. The program consists of English, Icelandic, life skills, social studies, vocational studies, math, and sports. The schools have the authority to organise this program as they see fit, for example one school might put special emphasis on cuisine and service and another on horsemanship.

Secondary schools have different offers for students with different challenges - practical examples

There are approximately 40 secondary schools in Iceland. Most of them offer special programs in the respective schools for students with severe learning difficulties. Secondary schools in Iceland have the freedom to organise programs as they see fit in accordance with the Icelandic qualification framework and offer special programmes at mainstream upper secondary schools. Upon completion of this basic

vocational program can give these students the potential to find a job that or continue their education.

It should be noted that there is no specific strategy or vision that focuses specifically on how to meet or accommodate individuals with disabilities in Vocational programs that have qualifications on EQF level 4 and 5. It is however evident as has been described here above and follows in the next chapter that there is a somewhat developed system to meet young people with diagnosed disabilities coming directly from the compulsory schools.

For example, young people can get information on career development through a portal called Áttavitinn (e. the compass) aimed at young people from the age 16-25 years old that offers information on different life skills and topics that may be of use, including education programs, including basic vocational education (starfsbraut).

About starfsbraut (e. Basic vocational program)

Basic vocational programs are intended for students who have recognized diagnosed disability according to law no. 59/1992. The program is organised by the schools underpinned by the curricula and is individualized and flexible. The studies are based on 4 years. The number of credits students graduate with is individual, but students graduate after 4 years regardless of the number of credits. The organisation of the studies and teaching is organized and adapted with regards to each individual student who enrolls in the program at any given time. The main emphasis is placed on strengthening the students' social relations and preparing them for continued studies with appropriate qualifications and/or participation in the labour market. According to a recent study organised by the Ministry of education on Opportunities for young people with disorders that have completed basic vocational programs in the secondary schools show that half of the graduates participate in some activity directly

upon completion of the program, work, or further studies. Approximately 75% of the graduates are participating in society through work or attending further studies four months after graduation.

5. Examples of good practice - inclusive education in VET

Here follow some examples of secondary schools in Iceland that organise programs for students with special needs (starfsbraut) and their specialization.

Fjölbrautaskólinn í Breiðholti (FB) (e. Comprehensive college of Breidholt)
– www.fb.is

The comprehensive college of Breidholt started their basic vocational program in 1999 and according to Sigurður Fjalar Jónsson, teacher, that has been teaching their students since the beginning, says that each college offers their own special program for the students, depending on the college. At FB special attention has been on the use of ICT, arts, and sports. According to FB web page on the program, special efforts are being made to increase students' independence and self-responsibility by making them more aware of their own personality, social relations, and the environment. Some practical examples:

- Setting up a second-hand store, collecting broken jewellery and making new ones, selling them at their own shop, Framtíðarbúllan (e. futurejoint) a second-hand store, and donating part of the profits to assist in Ukraine.
- 3rd and 4th year students take internships in companies.
- Students attend art shows and exhibitions as a part of their studies.
- Student have access to FAB lab where they learn computer programming and learn to use different methods in creating artifacts through digitalisation.

- Students put on fashion shows, plays and singing contest that are shown for the whole school.
- Students make a digital Advent calendar.
- Students are an active part of all events at the school as much as possible but can depend on the individual.
- The students are active on Facebook and their various projects can be seen on <https://www.facebook.com/Starfsbraut/> .

Menntaskólinn í Kópavogi (MK) (e. Comprehensive college of Kopavogur)
– www.mk.is

The comprehensive college of Kopavogur (MK) started their basic vocational program in 1999 with a specific group in mind, autistic and related communication handicapped individuals. Their learning environment is organised based on the TEACCH philosophy, which stands for Treatment and Education of Autistic and related Communication handicapped Children. Each individual needs special attention. Assessment is diverse and methods consider diverse teaching methods, learning goals and student abilities.

The goals of study and teaching are to promote the comprehensive development of the student, to provide students with individualized learning opportunities, to increase self-confidence, independence, and communication skills, to provide students with experience, knowledge and skills that are useful to them in everyday life.

- This group needs much attention and support.
- Regular students can choose a to take a course as a part of their studies
- Social support for autistic people.

Borgarholtsskóli (Borgo) (e. Borgarholtsskoli - Comprehensive college) – www.bhs.is

The college offers students that have had significant support in compulsory school special support and have been doing so since 1995. Like other secondary schools that offer this program, they must follow the curricula guide but do have freedom in how to implement it. There is slight difference in the name of the program. This school calls the program special education. This school offers vocational education and training in car industry, metal, and mechanics as well as art and social and leisure studies. Students with special needs have access to teacher and facilities but always provided with support from specialised teachers.

- In 2006 a special cultural fund was established. The objective of the fund is to strengthen the ties between the needs of these special students and cultural offers available in Iceland.
- The students organise talent shows.
- European collaboration: Mobility visits between colleges, teachers, and students.

Tækniskólinn (e. Technical college) – www.tskoli.is

Starfsbraut (e. Basic vocational program) is intended for students who have studied in special departments of elementary school or have had a lot of special education at elementary school level due to disability or other reasons, and do not have the possibility to pursue full-time studies in other study programs. Study courses offered:

- o **Vocational course with crafts and arts** - up to twelve students in each group and the course lasts four years. The course teaches general, theoretical subjects such as mathematics, English and Icelandic.

The specialty of the course is the practical part of the program, where students can get to know at least three trades and/ or arts. Examples are the wood industry, drama, information technology, metal industry and design and art studies. Sports are taught in all semesters of the course as well as more exciting courses such as safety studies, preparation for driving tests, life skills and health studies.

According to the Main Curriculum for Secondary Schools 2011, studies at the first level can also include general preparation for jobs in the economy, jobs that do not require a lot of specialization and are done under the control or supervision of others.

University studies for persons with disabilities – basic diploma

Since 2007 the University of Iceland has offered a two-year program for individuals that have disabilities. The purpose of the program is to provide people with developmental disabilities an opportunity for an active and full community participation. The aim of the program is to prepare individuals for work, for example in schools, kindergartens, community centres.

The programme is organized in accordance with the stated international policy of the interests of people with developmental disabilities and human rights. This including the policies of the University of Iceland.

The students prepare for working life, according to the curricula organised by the faculty of Education at the University of Iceland. Potential career opportunities could be kindergarten, as well as leisure and social activities centres. Great emphasis is on empowerment of the individual and how to participate and deal with conflict of interest and participation of persons with disabilities in society.

Special emphasis is placed on connecting students to the general labour market and one of the main objectives of the programme is to increase

students' opportunities for community participation. The program also focuses on the rights of persons with disabilities and human rights.

6. Information and communication technology (ICT) and vocational education

“Information and communication technologies (ICT) is defined as a diverse set of technological tools and resources used to transmit, store, create, share or exchange information. These technological tools and resources include computers, the Internet (websites, blogs and emails), live broadcasting technologies (radio, television and webcasting), recorded broadcasting technologies (podcasting, audio and video players, and storage devices) and telephony (fixed or mobile, satellite, visio/video-conferencing, etc.).”

(<https://learningportal.iiep.unesco.org/en/glossary/information-and-communication-technologies-ict>)

It is important to take into consideration the following in regards with ICT



and VET in Iceland; Most secondary schools in Iceland are comprehensive colleges, meaning that they offer both academic and vocational programs. Students can apply for university studies that complete general academic or vocational studies at IQF level 3 (EQF 4). Therefore, it is not possible to speak of ICT and VET exclusively as for most secondary

schools in Iceland are comprehensive and opportunities and access to ICT is the equal for both VET and general academic studies. *Components of ICT.*

Making the change – introducing ICT- in to the Icelandic secondary school

In 1999, the Minister of Education, Björn Bjarnason started a project to ensure students in secondary schools' access to laptops for studying. This also meant that teachers needed to adopt ICT skills. One of the pioneering schools, was Kopavogur Comprehensive college. It took five years for the school to equip all teachers with laptops to be used in teaching. Even though this was a great leap it was not without challenges. Ásrún Mattíasdóttir wrote her doctoral thesis on the implementation of ICT at the Kopavogur comprehensive college. The main results showed that the most interested teacher worked hard to integrate ICT into their teaching and were eager to improve their technological pedagogical knowledge. These same teachers felt that reorganisation of school was needed to support the development. The school authorities were supportive in the beginning, but later were not able to support fully the initiatives of the most active teachers. This did not affect the most interested teachers. Teachers that were less interested slowed down the development along with the students' limited involvement. That later revealed that student played a passive role and did not recognise the potential but saw usefulness and advantage of ICT on 'here and now' in their studies but not in a pro-active way.

Two decades later – ICT today

In Iceland it is near impossible vision working environments in the labour market, at home or in educational institutions without ICT. The digital transformation of production and services is affecting our everyday life.

According to a report from OECD, Iceland is an innovative country. Technological innovations are leading player in energy, fishing and high tec food production. The workforce is well educated. This is supported by

access to and use of high-speed internet tiers that support a solid foundation for the digital advances. Notably, Iceland's density of Internet subscriptions in higher speed tiers, underpinning digital transformation, is well above the OECD average. This foundation is reflected throughout the educational system at all levels.

Government ICT strategy for primary and secondary school system 2014-2024

Here follows an overview on the government strategy on ICT (2014-2024) and some good examples of actions taken as a result.

About 10 years ago a working committee was appointed to create a basis for a strategy and action plan for the use of information and communication technology (ICT) for primary and secondary school. The working group consisted of representatives from the educational community and business life.

Main objective was to build strong competence in information and communication technology across school levels in collaboration with industry, where applicable, to ensure exploitation, development, and creative schoolwork with the interests of individuals and society. Six key factors in promoting information technology in schoolwork were presented with action points for improvement. These six key factors are: research and development, access to technology, diverse open access to digital teaching material, collaboration between schools and working life, creativity, and teachers' education.



Six key factors to promote ICT in the education system in Iceland

Here follow some actions that have been taken so far:

Teachers' education: Action point for improvement. A study about online learning with the focus on how secondary schools and teachers dealt with the sudden shift to online learning caused by the COVID-19 pandemic. The results gave a better picture on how well equipped the schools are to deal with and address ICT. The study also revealed access to online teaching material and the professional know how of the teachers. A total of 827 teachers and school administrators answered the questionnaire. The results indicate that schools were rather well equipped to deal with increased online learning, both in terms of digital tools and students' access to technology. About half of the schools had considerable experience with distance learning, almost half of the teachers had experience with distance learning and considered that experience to have been beneficial. Teachers' answers to open-ended questions (N=659) revealed that the main challenges were keeping in touch with students and

making sure they didn't give up on their studies. It was mentioned that it had been difficult to apply diverse teaching methods in the distance education and that there had been a tendency for the teaching to shift to a traditional form where the teacher was in the role of mediator and the students were passive listeners. The experience of teaching online opened teachers' eyes to opportunities to better meet the needs of individual students using technology. Some thought it likely that schools would increasingly offer mixed learning, i.e., use both distance learning and on-site learning, which could increase flexibility in schoolwork. To promote the development of learning and teaching in the future, it is an urgent task to strengthen the technical skills of teachers in relation to knowledge in pedagogy.

Teachers in Iceland have access to continues development including ICT courses. The teacher's union is in the forefront in promoting continues development of teacher's competences and teachers have access to various funds and support.

ICT training course for teachers are organised by University's in Iceland. Teachers take advantage of Facebook for Peer sharing; there many good examples and discussions can be found.

Creativity: Action points for improvement. The government ICT strategy encourages the education system to explore different kinds of pedagogical approaches. An example given is to explore further *flipped classroom* teaching. In a longitude study published in 2022 it is stated that flipped classroom teaching shows that combining flipped classroom methodology and ICT improved students' level of competences.

One of the more progressive secondary schools in Iceland, Keilir has been using the flipped classroom method and has been very useful with the diverse student group that they cater to.

Collaboration between schools and working life and access to technology

In recent years there has been an ongoing reform in Vocational Education in Iceland. Giving the upper secondary schools a bigger role in ensuring apprenticeship contracts and organising workplace learning in the regulated trades. This reform is also giving the labour market a bigger role and in 2021 the social partners on labour market joined forces and established an office (Nemastofa – www.nemastofa.is) to be run by two training centres, owned by the social partners. The purpose of the office is to be a collaborative platform for apprenticeships and internships and to improve the quality workplace learning. Also, to increase the number of skilled workers in the world of work. The company's goal is, among other things, to increase the number of companies and craftsmen who take on trainees through apprenticeship contract. Assist companies and craftsmen in maintaining the quality of on-the-job training and targeted teaching and training of apprentices in the workplace and promote vocational education and training. This platform gives the companies and the secondary schools a formalised platform to communicate, collaborate and face challenges together.

This pioneering office that has been described is also responsible for organising and displaying a list of companies that qualify to train apprentices and training the trainers. This training includes how to use the **digitalised logbook** in vocational education and training.

Diverse open access to digital teaching material

This digital logbook will be available in most crafts, trades and professions in the health sector qualifying at EQF 4. This digital logbook is used nationally and was truly a huge task to take on. Finally, after decades of development this digital logbook has come to light. The trainer, school

representatives and apprentice log on to the same platform and can together ensure the progress and the quality of the training. Examples of the digital logbook are available but as this is personal information, the users must log in through an electronic ID.

One of the leading book publishers in teaching material, IDNU has taken the first steps publishing **digital teaching material**, the material is not free of charge but available upon payment. Another good example on access to digital material, and has been available for the past 10 years, is developed and organised by RAFMENNT Electrical VET Centre - educational and training centre for electricians, electronic technicians, and technicians in the fields of telecommunication, information technology, audio visual and broadcasting. This electronic library of the contains study materials for students (pdf format), manuals useful for electricians and links to various useful sites related to the electrical industry. Access to digital library rafbók.is is open to all and free of charge to users, but one must register accordingly.

Research and development

In the government ICT strategy for compulsory and secondary education point out the importance of development work and research in the field of information technology and communication. What will be developed and its usability. Therefore, professional, and academic aspects must be considered. It is important for teachers, academics, interested parties like municipalities and the state to collaborate and share information. One of the action points made in the before mentioned strategy is to strengthen a collaboration platform, called Menntamidjan (*e. Education centre*). The aim of the centre is to be a gateway to the professional development of all educators. Grassroot collaboration is encouraged from professional groups in the education system. This platform is also used to share information national and international events and research among other

things creating a community of practice. So far, this platform has investigated how the school system has developed and coped with the effects of Covid. This research was conducted by the Faculty of education, University of Iceland and has revealed that the Icelandic school system was well prepared in regards with the technical infrastructure to provide distance learning. However, many secondary school teachers had never organised distance learning, so it was a huge learning curve for them.



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Validation of non-formal and informal learning in Iceland.
https://frae.is/storage/2022/01/Baeklingur-enska_1342453022.pdf

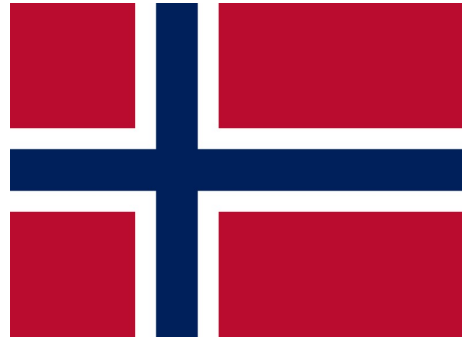
University of Iceland. Faculty of Education and Diversity.
https://english.hi.is/faculty_of_education_and_diversity

Development of materials:

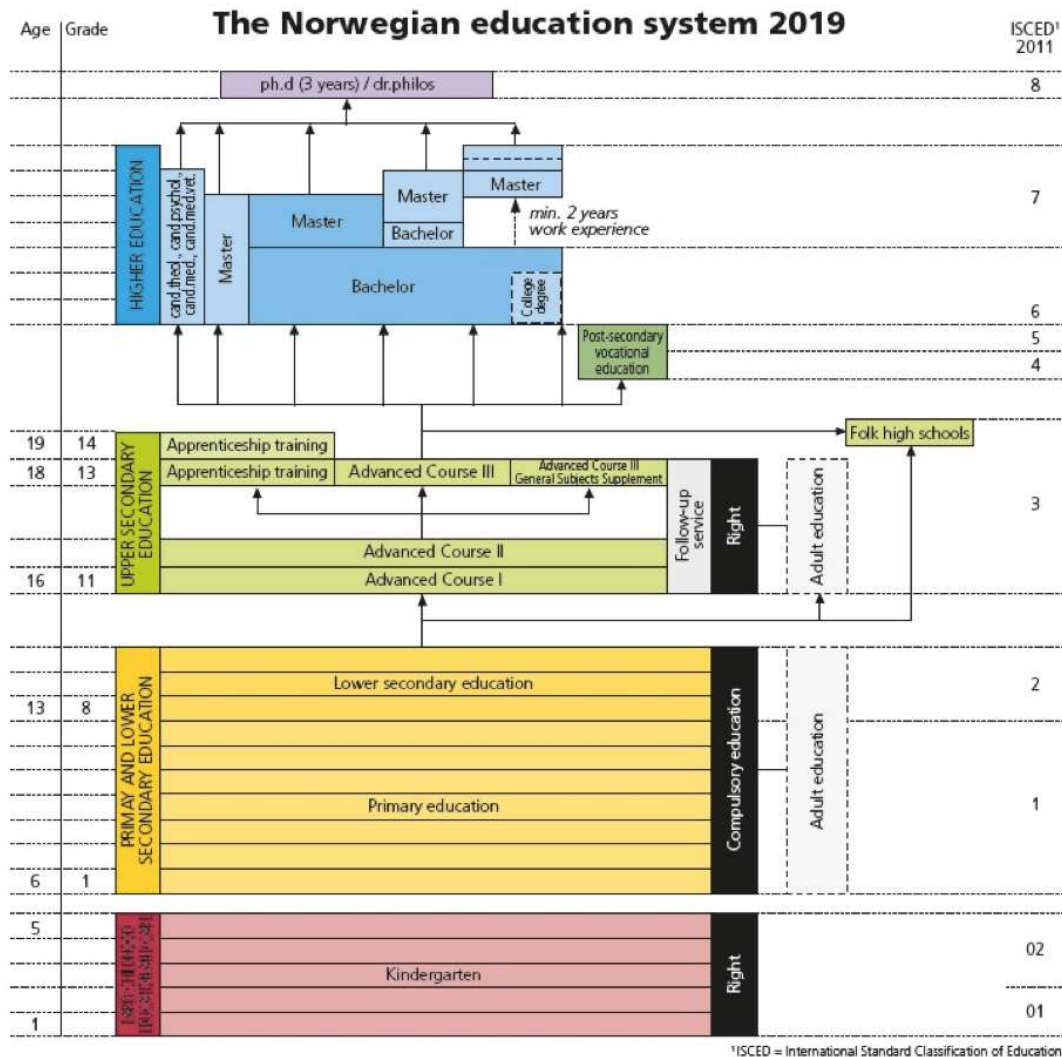
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V. THE EDUCATION SYSTEM IN NORWAY

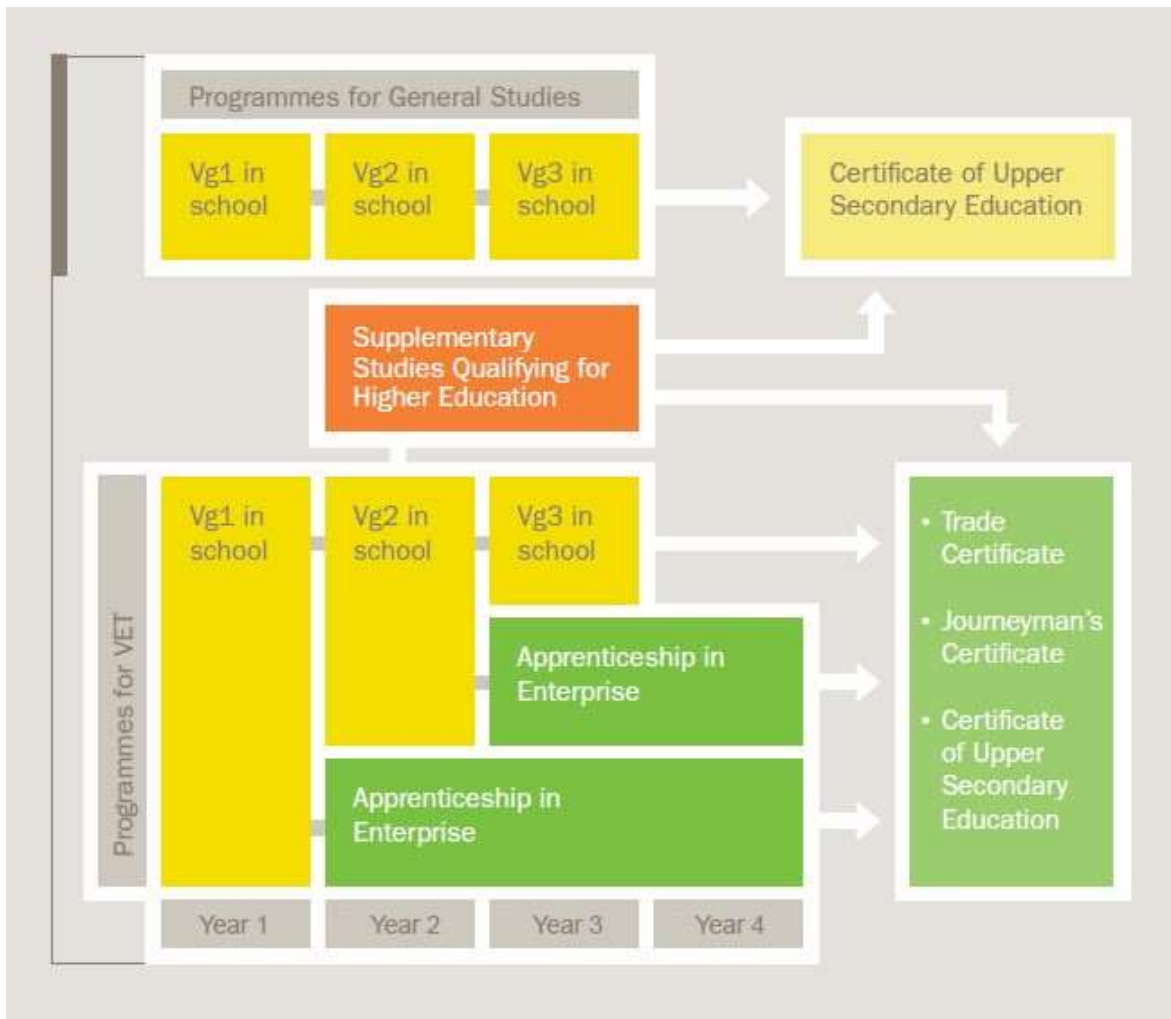


The whole course of education in Norway is divided into four levels: primary, lower and upper secondary, and higher education. Primary and lower secondary are mandatory which means that all children and youth from the age 6 to 15 are obliged to attend school. Upper secondary education is voluntary which means that all youth aged 15-19 have the right to go to school. In Norway it is estimated that over 90 per cent of students after completing obligatory primary and lower secondary schools continue their education at the upper secondary level. After obtaining a certificate of the upper secondary education, it is possible to apply for higher education at universities or high schools. The illustration below, taken from the website of Statistisk sentralbyrå (Statistics Norway) even though it is dated from 2019 it is still valid and can be used as a clear picture of the system.



(https://www.ssb.no/en/utdanning/artikler-og-publikasjoner/_attachment/373651?_ts=16813a35da0 downloaded 13.06.2022)

Because our project concentrates on the vocational education , we will elaborate on this part and explain the opportunities a youth choosing VET has as far as his/her choice of education or work career. To make it easier to understand different paths, we can use the following diagram



(<https://www.udir.no/in-english/norwegian-vocational-education-and-training/> downloaded 07.06.2022)

As it is illustrated above there are a few paths to professional career our students can take when they choose vocational programmes. Depending on the programme and/or its organisation, students can spend different length of time at a school desk and in apprenticeship in a company which at the end can lead them to trade and journeyman's certificates. Whichever path they take, it is always possible to return to school to attend supplementary studies, which creates a chance to obtain a certificate of upper secondary education which opens doors to many programmes on the tertiary level of education.

The misconception that vocational programmes are only for those who do not want to study has led many students and their parents to dismiss this

option. The statistics show that the trend reverts and more and more youngsters choose vocational programmes as it allows them not to resign from an idea of further education. In the school year 2021-2022 there were 51% applications to vocational education, which in practice means 1000 more applicants for the VET in Norway last school year.

(<https://www.worldskills.no/aktuelt/2021/flertall-av-sokere-til-yrkesfag-for-skolearet-2021-22/> downloaded 07.06.2022)

Adult Education

Adult education is an education offer specially adapted for adults, their needs and limitations. Adults participate in such training offers in order to gain vocational competence and/or to obtain a basis for further education on any level, which means they can further on get a trade certificate, vocational or study competence certificate. In the adult education centres one can also get prior learning assessment and study guidance. The training offers follow the levels in the education system but are financed and organised by different administrative entities. Municipalities are responsible for primary and lower upper secondary education for adults, while the upper secondary education is the counties' responsibility.

The teaching is adapted with regard to time, place and progress in the training; and it is offered as full-time or part-time (during the day or in the evening). It can be also organized in several ways, both at school, as online education or in other ways, for example partly at school and partly in a company or an institution.

According to the Education Act, adults over the age of 16 have the right to primary and lower secondary education if they need it. This rule applies to both Norwegian citizens and foreigners with a valid residence permit. They also have the right to counselling to map their educational needs, and the

right to an education that is adapted to their individual requirements, including special education based on goals and prerequisites.

Municipalities have another educational offer directed at the adult immigrants and which meets the requirements of the Introduction Act. According to it, learning the Norwegian language and some social studies elements is a right and obligation to immigrants and refugees with certain types of residence permits. This is treated as a basis for better life in Norway, getting education and pursuing a professional career.

To be entitled to free adult higher secondary education, to have so called “adult rights”, one must be over 25 years of age and have not completed upper secondary school, either in Norway or in any other country. Adult students can complete their education in both vocational and academic schools.

There are several ways to get a trade certificate (certificate of apprenticeship). Students can take the “regular” way: 2 years at school plus 2 years of apprenticeship; or 1 year at school and 3 of apprenticeship; or 5 years of regular work plus a theory exam. No matter which way they choose, they must pass the final exam in order to get a trade certificate. Each education programme has their own curriculum, which is the same no matter the path chosen to get the trade certificate.

FITJAR VIDEREGÅANDE SKULE



Foto: Christer Stewart Aarbø

Our school is small but with a very long history because the first school here was already established in 1897. It was Sunnhordland Amtskule (Sunnhordland county school) which offered education on the secondary level to children of the county inhabitants. Even though that school changed locations in Sunnhordland region it functioned in our building for a total of 22 years. The predecessor of Fitjar vidaregåande skule was Fitjar Husmorskule opened at our location in 1933. This was a boarding school recognized in the region and offering vocational education for housewives. Women learnt here how to manage and run a household and a farm and how to take care of household members and animals. In 1974 the school changed name to Fitjar fagskule i husstell (Fitjar vocational school for housekeeping) and finally in 1980 it got its contemporary name.

Fitjar vidaregåande skule caters for ca 200 students and employs a staff of ca. 40 teachers and assistants. Our students who come here may choose between 3 main vocational programmes:

1. Health and development, which gives them a chance to learn to become either health care workers or child and youth workers

2. Food processing and serving
3. Aesthetic programme which offers education within hair styling, floriculture, interior design, handcraft and many more.

We offer a supplementary studies course as well, which gives our students an opportunity to gain a Certificate of Upper Secondary Education, and which enables our graduates to apply to tertiary education institutions.

Youth, and adults, who attend our school come from the wide region of Sunnhordland and represent the whole scope of the society. Therefore, every year we meet students who thrive at school, those who struggle with some serious problems and those who need just some small adjustments in the learning-teaching process. In Norway there is a rule that every student should attend common classes so we meet youngsters with particular educational requirements resulting from a whole range of learning difficulties, physical disabilities or impairments, or emotional and behavioural difficulties.

As teachers we are obliged by law to customize teaching-learning process to the requirements of every single student to assure him/her a proper development, which in practice means a lot of minor or greater adjustments to fulfil the requirements of our students.

Accommodating teaching and learning process to students' needs

Every school and teacher in Norway is obliged by the Education Act to accommodate teaching and learning process to the students' needs. It does not necessary mean that these are "weak" students with special education needs resulting from certain health conditions but also "ordinary/average" students or "very clever" ones. We treat this obligation

very seriously and make constant adaptation throughout the school year depending on the situation. Those adaptations are made on two levels: school level which means that school authorities together with specialists in different fields can decide on; and classroom level where the adaptations are introduced by teachers observing and working with students .

The facilitation of teaching and learning process on the upper level are the following:

- Some students learn to achieve a minimum goal, but the aim is to be able to get a grade in a subject
- Some students may receive training in parts of the curriculum, so that they receive a certificate of competence and not a final certificate
- Some students need to go to VG1(1st grade) over 2 years. Then we divide the subjects so that they can complete some subjects one year, and some the next year.
- Some students need to have close contact with an assistant that offers extra help with various things such as support in social situations, theoretical subjects, or in practical work.
- Some need to have shorter days and do some work at home,
- Some students have a separate break room when needed.
- Some students need a conversation partner regularly, and have regular appointments with either a nurse, counsellor, psychologist or a contact teacher
- We have liaise closely with parents to check if the learning and teaching plans function properly

- We are especially close to the students who have problems to get to school – then the school helps by organising individual transport
- Constant cooperation of the teachers, principal and support entities at school and outside
- We provide classes with two teachers and two rooms, in addition to group rooms, so the students can work in smaller groups if needed
- Courses for students on learning techniques and how to cope with the fear of speaking.

When teachers meet students in the classroom, they can observe them and customize teaching and learning process when needed. The “one size fits all” approach to teaching is not something we advocate but some accommodations may be beneficial to all our students. It can either enable students with special pedagogical needs cope with the tasks or facilitate them for “ordinary” students. Some examples provided below are universal for all subjects and some are suitable either for general or vocational subjects. Here is what we do:

- First thing first is building positive relations with our students – getting to know our students, their needs, making them feel safe, seen and heard;
- Empowerment – positive feedback as many times as possible and giving our students a chance to succeed because it makes them motivated;
- Variation in teaching methods and activities - the use of additional teaching and technical means to prevent boredom and loss of concentration;

- We divide the teaching material into smaller parts, reduce the number of tasks to be performed and increase the number of exercises and repetition of the material;
- We can organize teaching in different ways, use alternative training arenas;
- Using the method of visualization - enabling multi-sensory cognition;
- Adjusting the number of stimuli related to the learning process;
- Variation in assessment situations - some must have their tests in an oral form instead of written or it can be a combination of both forms;
- Customize tasks and tests (different time limits and/or amount of work/tasks to be done, topics, and size of texts to be written);
- Evaluation of the teaching/learning process and self-evaluation done by students;
- On-going evaluation (during the work so that a student can improve his work while still working on the task);
- All planned activities and tasks are presented and listed digitally;
- Overview plans for the subject are in plans folder in It's Learning (learning platform);
- Daily plans are on the notice board on It's Learning together with links to the additional teaching materials (films, audio files, pdf documents, simplified texts, youtube snippets etc...) and work instructions;

- Some students when they are ill and cannot come to school, can follow the plan for the lessons on the learning platform and do the tasks at home
- At the beginning of the lessons, we go through the content of the lesson and show the daily schedule on the notice board. We read through the material and the instructions. Extra follow-up of individual students is done afterwards;
- All documents are published digitally so that they can be read by textpilot;
- Students are encouraged to use PC, Text-Pilot and or voice-controlled text production in Word;
- Students are supposed to produce and deliver their tasks digitally;
- If digital reading of the text is not available, the teacher reads the text to all students or to those who have need for it. This can also be done in groups;
- Use of the digital version of the handbooks (audiobooks with extra activities);
- All notes arrangements are digital. If teacher writes on the board or with a pen, he/she uses block letters;
- In projects layout, clarity in text, font type, headings and images are important. We avoid chaos in the document so that everything becomes clear;
- A lot of group work – students are more willing to talk in small groups than in front of the whole class and everyone can contribute to the final product;

- In English classes we allow so called International English – all accents and variations are allowed as long as it is comprehensible. The main goal is communication (oral or written) not achieving a perfect accent
- Assessing English written texts we use target correction which means a selection which grammatical and/or linguistic structures are corrected in different texts. We avoid making everything red so we emphasize different grammatical and/or linguistic elements at different times

Fitjar vidaregåande skule has a motto “**A good place to be, a good place to learn**” (Ein god plass å vera, ein god plass å læra) and we work hard to keep this promise and make our students to feel well at our school and get a decent education. Positive relationships with students and customization of the teaching and learning process give our students the feeling that they belong somewhere and prove that they can achieve their educational goals. It prevents drop-outs and gives our students a chance to obtain education and start a successful professional career when they graduate from our school.

Development of materials:

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