



MINISTRY OF
EDUCATION AND CULTURE
FINLAND

Policies for the digitalisation of education and training until 2027

Ministry of Education and Culture

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Policies for the digitalisation of education and training until 2027

Ministry of Education and Culture

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Policies for the digitalisation of education and training until 2027

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Abstract

International and national strategies set ambitious targets for the digital transformation of education and training, which has developed rapidly in recent years. Determined cooperation is needed to meet the objectives and development needs.

The vision for Finland is to become the world's leading developer and user of sustainable digitalisation in teaching and education and training by 2027. Digitalisation promotes equal opportunities for everyone to learn and develop. Digital tools and environments support the individual needs of learners and promote equality and the accessibility of education. Digitalisation supports cooperation between actors and learning at different stages of life. The promotion of digitalisation will be based on knowledge and follow the principles of sustainable development.

The realisation of these policies will mean increasing the competence of individuals and advancing equality, long-term, innovative and systematic development of digital solutions in the sector, strengthening the knowledge base of education policy and education management, and improving wellbeing extensively through active digital citizenship.

The policies are shared by the sector and apply to the entire education system. This document describes the measures required to develop digitalisation and defines the division of responsibilities between the Ministry of Education and Culture and the Finnish National Agency for Education.

Keywords education, training, teaching, digital transformation, digitalisation

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Kasvatuksen ja koulutuksen digitalisaation linjaukset 2027

Opetus- ja kulttuuriministeriön julkaisuja 2023:48		Teema	Koulutus
Julkaisija	Opetus- ja kulttuuriministeriö		
Yhteisötekijä	Opetus- ja kulttuuriministeriö		
Kieli	englanti	Sivumäärä	21

Tiivistelmä

Kansainväliset ja kansalliset strategiat asettavat kunnianhimoisia tavoitteita kasvatuksen ja koulutuksen digitalisaatiolle, jonka kehitys on ollut nopeaa viime vuosina. Tavoitteisiin ja kehittämistarpeisiin vastaaminen edellyttää määrätietoista yhteistyötä.

Visiolauseessa Suomi on maailman johtava kestävä digitalisaation kehittäjä ja hyödyntäjä kasvatuksessa, opetuksessa ja koulutuksessa vuonna 2027. Digitalisaatiolla edistetään kaikkien yhdenvertaisia mahdollisuuksia oppia ja kehittyä. Digitaaliset työkalut ja toimintaympäristöt tukevat oppijoiden yksilöllisiä tarpeita sekä edistävät yhdenvertaisuutta ja koulutuksen saavutettavuutta. Digitalisaatio tukee yhteistyötä toimijoiden välillä ja oppimista elämän eri vaiheissa. Digitalisaatiota edistetään tietoperustaisesti kestävä kehityksen periaatteita noudattaen.

Linjausten toteutuminen merkitsee osaamisen kasvua ja yhdenvertaisuuden edistymistä, toimialan digitaalisten ratkaisujen pitkäjänteistä, innovatiivista ja systemaattista kehittämistä, koulutuspolitiikan ja koulutuksen johtamisen tietopohjan vahvistumista sekä laajasti hyvinvoinnin paranemista aktiivisen digitaalisen kansalaisuuden myötä.

Linjaukset ovat toimialan yhteisiä ja koko koulutusjärjestelmää koskevia. Asiakirjassa kuvataan digitalisaation kehittämisen edellyttämät toimenpiteet sekä määritellään opetus- ja kulttuuriministeriön ja Opetushallituksen työnjako.

Asiasanat	kasvatus, opetus, koulutus, digitalisaatio		
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Riktlinjer för digitaliseringen av fostran och utbildning 2027

Undervisnings- och kulturministeriets publikationer 2023:48	Tema	Utbildning
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Referat

Internationella och nationella strategier ställer upp ambitiösa mål för digitaliseringen av fostran och utbildning. Digitaliseringen har utvecklats i snabb takt under de senaste åren. Det behövs målmedvetet samarbete för att målen ska kunna nås och utvecklingsbehoven ska kunna tillgodoses.

Enligt visionen är Finland ledande i världen när det gäller utvecklingen och utnyttjandet av hållbar digitalisering inom fostran, undervisning och utbildning 2027. Med hjälp av digitaliseringen främjas jämlika möjligheter för alla att lära sig och utvecklas. Digitala verktyg och miljöer stöder elevernas individuella behov och främjar jämlikheten och tillgången till utbildning. Digitaliseringen stöder samarbetet mellan aktörerna och lärandet i olika skeden av livet. Digitaliseringen främjas på ett informationsbaserat sätt i enlighet med principerna för hållbar utveckling.

Genomförandet av riktlinjerna innebär att kompetensen ökar och jämlikheten förbättras, de digitala lösningarna i branschen utvecklas långsiktigt, innovativt och systematiskt, utbildningspolitiken och informationsunderlaget för ledningen av utbildningen stärks och välfärden förbättras på bred front tack vare ett aktivt digitalt medborgarskap.

Riktlinjerna är gemensamma för branschen och gäller hela utbildningssystemet. I dokumentet redogörs för de åtgärder som utvecklingen av digitaliseringen förutsätter. Dessutom fastställs arbetsfördelningen mellan undervisnings- och kulturministeriet och Utbildningsstyrelsen.

Nyckelord	utbildning, fostran, undervisning, utbildning, digitalisering
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1 Introduction

In recent years, digital solutions and learning environments for education, teaching and training have been developed in a determined manner at the national level as well as by individual education and training actors and their cooperation networks. The Education Policy Report made in Finland by Sanna Marin's government (2019-2023) outlines the 2040 target:

New technologies are used extensively and innovatively to support learning. The digital learning environment is highly evolved, and the data repositories for education are available to both people and society to promote learning and pedagogical development. Digital education, learning platforms and solutions enable independent learning, regardless of time and place.

Achieving the goals set in the Education Policy Report will also require determined work in the coming years.

European future-oriented work is guided by the EU's Digital Education Action Plan, whose main goals include the development of efficient education ecosystems and the digital skills and competencies needed in the digital transformation¹, and the EU Data Strategy, which highlights the potential for collecting, analysing and using data to improve education.

1 The first priority of the Digital Education Action Plan requires Member States to invest in their digital infrastructures, telecommunications connections and digital devices. Further aims include effective digital capacity planning and development, up-to-date organisational capacity, digitally competent education and teaching personnel, high-quality learning content, user-friendly tools and safe platforms that respect privacy and ethical standards. The second priority requires the development of basic digital skills, such as digital literacy, the fight against disinformation, a programming mindset and understanding of data-intensive technologies from an early age. There are also investments in the training of advanced digital skills to ensure the training of experts in the field of digitalisation and to safeguard equal representation of girls and young women in digital studies and careers.

The vision of Finland's Digital Compass submitted to Parliament is "a digitally capable Finland that is attractive, competitive, sustainable and prosperous". The Digital Compass covers the goals set for the development of competence², infrastructure, businesses and public services until 2030. The measures of the vision for the digitalisation of education, teaching and training support the achievement of the targets defined in the Education Policy Report, Finland's Digital Compass and other strategic documents.

The global coronavirus epidemic highlighted the importance of well-functioning digital learning environments and digital competence. During the pandemic, the Finnish education and training sector succeeded well in transferring to and implementing distance education. Teaching arrangements developed during that time promoted well-functioning digital and pedagogical practices, which continue to be used today. On the other hand, the pandemic interrupted systematic development efforts, as it was necessary to allocate resources to support the sudden change. The exceptional situation also highlighted challenges, such as the uneven distribution of good practices and competence among education and training actors. It is not yet entirely clear what the post-pandemic "new normal" will be like.

During the previous decade, several national digital services have been introduced in the sector.³ The use of national services is partly based on legislation and is partly voluntary. Education actors also have mutual joint services – for example, higher education institutions procure or produce joint services for higher education institutions.

In addition to digital solutions, digital competence has been promoted in recent years. The development of digital competence of learners and students of different ages has been supported, for example, with development projects related to the implementation of curricula and qualification requirements. Descriptions of digital competence have been prepared, and related goals have been set for some levels of education. The development

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- 2 In Finland's Digital Compass, competence is divided into digital education, basic digital skills and digital competence. This document uses the term "digital competence" as an umbrella term that covers the areas of the Digital Compass and the EU Digital Education Action Plan.
 - 3 These include the services for applying for education and student admissions, the National Registry and Data Transfer Service for Study Rights and Completed Studies (KOSKI), the Data warehouse for early childhood education (VARDA), the disclosure service of study and qualification records, the national core curricula and qualification requirements (ePerusteet), personal competence development plan (PCDP), the learner number register, national identification brokering service for education (MPASSid) and the Monitoring and Tracking Service for Compulsory Education (Valpas). The National Data Repository for Higher Education Institutions (VIRTA) and the Library of Open Educational Resources (aoe.fi) are maintained by the Ministry of Education and Culture. Vipunen, the education administration's reporting portal, is maintained by the Ministry of Education and Culture and the Finnish National Agency for Education.

of digital competence among the personnel in the sector has been supported by personnel training and continuing education as well as participation in development projects on digital competence and digital learning environments.

The legislative environment that steers digitalisation has changed significantly over the past few years. Key legislative reforms have included the data protection reform, the Act on Information Management in Public Administration and the Act on the Provision of Digital Services. In the context of the implementation of these legislative reforms, the Ministry of Education and Culture and the Finnish National Agency for Education have implemented information-based steering and produced support material, such as the Data Protection Guide, the Learning Analytics Framework, the *Publicity and Information Management in Education Services* and other material that supports the use of digital technologies in teaching. In the coming years, the steering of digitalisation must pay attention to the still-evolving regulation. In accordance with the EU Data Strategy, key regulations under preparation include the European Data Act, the Data Governance Act, the Digital Markets Act, the Digital Services Act, the AI Act and the Interoperable Europe Act.

Several significant projects promoting the digitalisation of education, teaching and training are underway in Finland, and will further develop the digital operating environment in the sector. Projects to develop new services and operating models include the development of a digital service entity for continuous learning and a joint digital vision project for higher education institutions. Education and training actors have launched wide-ranging development projects for information systems and ecosystems, and several activities aiming to promote knowledge management and data analytics are underway in the sector.

The sustainable development of education, teaching and training is supported by information. The information resources of the sector serve, on one hand, flexible service processes for individuals and the development of digital services, and, on the other, management based on up-to-date information, steering of the education system and decision-making on educational policy.

This document describes the vision of digitalisation in education, teaching and training to the extent that it concerns the education system as a whole. The measures and responsibilities that enable the implementation of the vision and the division of labour between the Ministry of Education and Culture and the Finnish National Agency for Education are also described. This document will later be complemented by more detailed information on individual levels of education, which will be implemented in cooperation with early childhood education and care (ECEC), education providers and other stakeholders.

2 Vision

Finland will be the world's leading developer and user of sustainable digitalisation in education, teaching and training in 2027.

Digitalisation is used to promote equal opportunities for everyone to learn and develop. Digital tools and operating environments support the individual needs of learners and promote equality and the accessibility of education. The digitalisation of education, teaching and training supports cooperation between actors and learning at different stages of life. The promotion of digitalisation is knowledge-based, following the principles of sustainable development, and it ensures ethical sustainability and individuals' wellbeing.

Everyone's ability to learn and develop their competence is improved through digitalisation.

- Digitalisation improves everyone's ability to learn and develop their competence.
- Digital competence is developing as a continuum throughout the learning path.
- The digital competence of personnel is developed systematically.

Digital solutions constitute a high-quality, interoperable digital operating environment supporting cooperation between actors.

- Internet connections and devices enable a digital operating environment that supports pedagogical work.
- Digital services and the supporting infrastructure are developed as a whole.
- The digital services and contents of teaching and learning are secure and of high quality.
- The development of digital solutions for teaching and learning is realised in broad-based cooperation.

Digitalisation supports knowledge-based development.

- The national data registries are up-to-date and of high quality.
- Data production, reporting and analytics solutions enable knowledge-based management and development.
- Management, foresight, guidance and development are based on knowledge.

The realisation of this vision results in increased competence of individuals and advanced equality, long-term, innovative and systematic development of digital solutions in the sector, strengthening the knowledge base of education policy and education management, and improving wellbeing extensively through active digital citizenship.

3 Goals, measures and division of responsibilities

3.1 Everyone's ability to learn and develop their competence is improved through digitalisation

All learners have equal access to the opportunities brought by digitalisation and are skilled to make use of them. This is a prerequisite for active citizenship. The learning path forms a life-long continuum for the learners, enabling them to develop their competence to a high level. All education, teaching and training professionals have first-class digital competence and capabilities for utilising digital solutions in a pedagogically sustainable way. Learners and teaching and guidance personnel play an active role in developing user-driven digital solutions in the sector.

3.1.1 Digitalisation improves everyone's ability to learn and develop their competence

Digital solutions are widely used in learning and building competence. They promote the development, inclusion and agency of learners and personnel. Making use of the opportunities offered by digitalisation can result in a more versatile range of available teaching and education, leading to more options for learners. Starting in upper secondary education, learners get to make use of the studies offered by different education actors and levels in individual ways. Digitalisation helps reduce regional inequalities in education, teaching and training.

Measures and responsibilities

- The Ministry of Education and Culture is responsible for the strategic steering of digitalisation in the sector and commissions research to promote and monitor the impacts of the development work.
- The Finnish National Agency for Education promotes the development of digital learning solutions and environments with education actors and business.
- The Finnish National Agency for Education coordinates and maintains network cooperation between education actors to promote digitalisation, especially from early childhood education and care to the upper secondary level. Collaboration enables identifying effective digital pedagogical practices, and promoting the quality, interoperability and client-oriented development of digital solutions.

3.1.2 Digital competence is developing as a continuum throughout the learning path

Digital competence penetrates the whole education system, and its internal transition phases are perceived as a continuum, ensuring competence at the top international level. The digital competence level pursued at different levels of education is based on descriptions of competence and the competence levels are assessed consistently. The availability of experts and the role of Finnish society as an international pioneer are ensured through the development of learning modules in accordance with the descriptions and comprehensive support for implementing them. The gaps in digital competence have narrowed, creating equal opportunities for full participation in society and ensuring the accumulation of digital competence.

Measures and responsibilities

- The Ministry of Education and Culture is responsible for the strategic definition of the target level of digital competence, maintenance of the definition and steering of measures in all areas of education, teaching and training.
- The Finnish National Agency for Education collects and analyses information on competence needs from different sources in cooperation with business.
- The Finnish National Agency for Education maintains and develops the digital competence descriptions it creates, supports actors in utilising them by producing information and making it available, granting funding and bringing the actors together.
- The Finnish Education Evaluation Centre regularly monitors and assesses the development of the digital competence of teaching and guidance personnel and learners and collects up-to-date data on this topic. The data can be used as a basis for identifying and steering necessary measures.

3.1.3 The digital competence of personnel is developed systematically

All those working in education, teaching and guidance tasks have sufficient skills and first-class competence for utilising different digital solutions that are of high quality pedagogically. The descriptions of the learner's digital competence as well as foresight and research data lay the foundation for the assessment and development of the personnel's digital competence. These data also enable the uniform assessment of digital competence and the implementation of continuing education based on needs. Those in managerial positions have the capabilities required in the strategic and knowledge-based

management of digitalisation. The continuous development of competence is of a high international standard, with particular emphasis on communal development and peer support.

Employees systematically develop their digital competence and understand its significance in their own work. Funding allocated to development is based on individual needs, personal development plans and the strategic objectives of ECEC and education providers. Continuing education that promotes digital competence is linked to other development activities and responds to needs, and its priorities will be in line with national objectives as well as those specific to the levels of education. The development of the digital competence of teaching personnel has been comprehensively taken into account in all development measures concerning teacher training.

Measures and responsibilities

- The Ministry of Education and Culture ensures that the development of digital competence and its funding are systematic, long-term and needs-based.
- The Ministry of Education and Culture is responsible for the overall steering of personnel training and sets quantitative and qualitative targets for the continuing education of personnel offered by the Finnish National Agency for Education.
- The Finnish National Agency for Education promotes the equality, inclusion, cooperation and peer support of actors in the development of digital competence as well as opportunities for open learning.

3.2 Digital solutions constitute a high-quality, interoperable digital operating environment supporting cooperation between actors

A high-quality and interoperable digital operating environment comprehensively supports the sector's strategic objectives and promotes the implementation of cooperation across levels of education and sectoral boundaries. Digital solutions are developed in cooperation nationally and locally. The services offered at the national level and services provided by different service providers are interoperable. All the education and training actors have a shared, maintained situational picture of the digital environments and services as a whole and related development needs. The roles of national and local services have been defined and their data flow descriptions are up-to-date. The division of responsibilities between actors and the development paths of national services and definitions is clear to all actors.

3.2.1 Internet connections and devices enable a digital operating environment that supports pedagogical work

Learners and personnel have access to telecommunications connections and devices that enable the high-quality implementation of the objectives of education, teaching and training. The use of digital technology is based on research knowledge and responds to the needs of learning and teaching. ECEC and education providers have the ability to make procurements and maintain a secure digital operating environment that is based on pedagogical criteria while ensuring the data protection of individuals.

Measures and responsibilities

- The Ministry of Education and Culture is responsible for strategic steering related to digital operating environments.
- The Ministry of Education and Culture ensures with its allocation of funding that research-based knowledge will be available on the use of digital technology.
- The Ministry of Education and Culture and the Finnish National Agency for Education fund development projects in education, teaching and training that promote operating models for the pedagogical utilisation of digital technology.
- In cooperation with ECEC and education providers, the Finnish National Agency for Education produces up-to-date information on the state of digitalisation in education, teaching and training.

3.2.2 Digital services and the supporting infrastructure are developed as a whole

Finland's digital infrastructure and services set an international standard of excellence. They are developed and maintained as a whole that includes the entire education path, supporting the needs of learners, personnel, early childhood education and care and education providers. The management of digital solutions and anticipation of development needs are based on a joint situation picture of everyone involved and a clear division of responsibilities.

Measures and responsibilities

- The Ministry of Education and Culture leads the work related to the enterprise architecture of education, teaching and training and is responsible for ensuring that the architecture promotes the target state in accordance with the Government Programme and other strategic policies, and develops and maintains it together with the Finnish National Agency for Education.

- The Ministry of Education and Culture and the Finnish National Agency for Education work together with different projects, networks and other stakeholders to create a well-functioning digital infrastructure and services and to further develop these while taking regional equality aspects into account.
- The Finnish National Agency for Education promotes and supports the introduction of architecture descriptions in interaction with development networks.
- The Finnish National Agency for Education promotes the pedagogical use of the digital operating environment from early childhood education to the upper secondary level as well as in liberal adult education and basic education in the arts.
- The Finnish National Agency for Education promotes the pedagogical quality and interoperability of digital services by producing support materials and supporting the dialogue and cooperation of education and training actors with service providers.
- The Finnish National Agency for Education maintains and develops the national services it is responsible for and ensures their accessibility, interoperability, customer service and communications.

3.2.3 The digital services and contents of teaching and learning are secure and of high quality

The implementation of digital services for teaching and learning are based on research and best practices, and the services are user-oriented and easy to implement. The range of digital services and learning materials is versatile, accessible, user-oriented and easily available. The culture of the utilisation of open learning materials is highly advanced and active on a global scale.

Measures and responsibilities

- The Ministry of Education and Culture enables the production of research knowledge that supports the development of services by directing funding.
- Together with its stakeholders, the Finnish National Agency for Education develops recommendations and support material to ensure the quality and safety of digital content and engages in regular dialogue with actors involved in producing content.
- The Finnish National Agency for Education strengthens inclusion, ownership, activity and a user-oriented approach in the utilisation and development of digital tools in cooperation with ECEC and education providers as well as other partners.

- The Finnish National Agency for Education promotes the culture of using open learning materials and maintains and develops the Library of Open Educational Resources service in cooperation with the representatives of different sectors.

3.2.4 The development of digital solutions for teaching and learning is realised in broad-based cooperation

Digital development in the field of education, teaching and training is open, and its results are available for everyone to utilise as extensively as possible. The use of open source code and licences supports the development and progress of education, teaching and training technologies.

Measures and responsibilities

- The Ministry of Education and Culture supports the development and introduction of innovations related to digital services and solutions by directing funding.
- In cooperation with the Finnish National Agency for Education, the Ministry of Education and Culture creates a network that fosters dialogue between the private, public and third sectors, different educational actors and related networks. With the support of this network, the Ministry of Education and Culture maintains a strategic overall picture of development needs and ensures the appropriate targeting of development projects.
- The Ministry of Education and Culture is responsible for ensuring that there are national rules and principles used to improve the interoperability of digital services and solutions. The Finnish National Agency for Education promotes the introduction and implementation of these rules and principles to ensure that different actors in the education and training sector as well as the companies providing services have the ability to operate in the digital infrastructure.
- The Finnish National Agency for Education will develop the digital services for which it is responsible with a client-driven approach and in compliance with shared architecture principles and interoperability. Clients and partners of the Finnish National Agency for Education play an active role in the service development.

3.3 Digitalisation supports knowledge-based development.

The joint data resources, statistical data, archive data and up-to-date analysis results and research findings of the education, teaching and training sector constitute an information infrastructure. Digital solutions used for the utilisation of research and data have developed around this infrastructure. The datasets and results have been described in a compiled, comprehensive and uniform manner, and are easily available and easy to utilise.

The data generated in national services and collected in joint data repositories are easy to examine and analyse using shared digital solutions. The solutions meet the needs of the actors that need the data and are based on joint public administration standards, practices and recommendations.

Decisions made in the sector are founded on knowledge and a situational picture based on up-to-date and high-quality data. Education and training actors have improved their competence in knowledge management, and know how to utilise a common knowledge base and develop their activities based on comparable data. The impacts of knowledge-based decision-making and digitalisation are studied and assessed as a part of knowledge-based development.

3.3.1 The national data registries are up-to-date and of high quality

The data in national registers as well as the education and training actors' own registers are reliable, up-to-date, interoperable and of high quality. Instructions, good practices, up-to-date communication and the sharing of competence ensure the high-quality forming of data. The parties involved in the chain of data formation understand the significance and impact of their activities on the formation of national data registries. The descriptions of data sets are uniform and openly available.

Measures and responsibilities

- The Ministry of Education and Culture is responsible for the strategic steering of the data registries and the interoperability, availability and quality of the data.
- The Ministry of Education and Culture, in cooperation with the Finnish National Agency for Education, investigates the current practices, problem areas and development options for utilising national register data and the ECEC and education providers' own datasets.

- Quality assurance related to the formation of register data is improved by the Ministry of Education and Culture by developing provisions and the Finnish National Agency for Education by means of regulations, instructions and support. This enables the availability of up-to-date, high-quality data for various operators.
- In cooperation with the Ministry of Education and Culture and other authorities, the Finnish National Agency for Education is responsible for developing the descriptions of register data and statistical data in education, teaching and training to ensure that the users of the source data will be aware of the properties of the data in order to prevent misinterpretations.
- The Finnish National Agency for Education, in cooperation with the Ministry of Education and Culture, examines the development needs and implementation alternatives for collecting and recording sum-level data from education and training actors.

3.3.2 Data production, reporting and analytics solutions enable knowledge-based management and development

The development of the information infrastructure for education, teaching and training has harmonised the practices of data storage, description, reporting and utilisation, and reduced the need for additional work related to joining data. The information infrastructure is accessible and user-friendly and there is widespread awareness of its potential applications.

Sector-wide solutions based on the information infrastructure and developed in the administrative sector enable data analysis and the utilisation of data of different quality in services, development, decision-making and research. Services aimed at data users in the sector provide both authorities and education and training actors with tools for the use of the data contained by the information infrastructure for data analysis, data mining or research tasks. Open data are available through self-service-based interfaces.

Personal microdata from education, teaching and education are available and can be combined with microdata from other administrative branches through Statistics Finland's services aimed at researchers.

Measures and responsibilities (*will be specified as the educational and cultural administration project⁴ progresses)

4 <https://okm.fi/hanke?tunnus=OKM071:00/2021>

- The Ministry of Education and Culture is responsible for the strategic steering of the development of the information infrastructure and promotes the operating conditions of the information infrastructure for education, teaching and training. This steering promotes the formation of uniform solutions and avoids overlapping data platform development.
- The Ministry of Education and Culture draws up a roadmap for the data utilisation and analytics included in the information infrastructure in cooperation with other authorities and actors in the education and training sector.
- A self-service basis, user-friendliness and machine-readable interfaces are developed for statistical services and datasets. *
- Efforts are made to develop services that provide public authorities, training actors, suppliers, companies and citizens with tools for exploiting the data contained in the information infrastructure. *
- The awareness, accessibility and user-friendliness of the developed solutions are promoted. *

3.3.3 Management, foresight, guidance and development are based on knowledge

The competence related to knowledge management, as well as the know-how it requires are of a high international standard among the authorities and education and training actors. Decisions made in the sector will be founded on knowledge and a situational picture based on up-to-date and high-quality data. Good industry practices, operating models and recommendations have been compiled to support knowledge management, and these will improve the preconditions for management and development both nationally and locally. Advanced knowledge management practices promote the equal and high-quality implementation of education, teaching and training at different levels of administration.

Measures and responsibilities

- The Ministry of Education and Culture is responsible for the strategic steering of knowledge-based management in the sector and for funding the development of knowledge-based management.
- The Ministry of Education and Culture and the Finnish National Agency for Education create an administrative model for the interoperability of education, teaching and training data in cooperation with stakeholders.
- The Ministry of Education and Culture examines the prerequisites for developing a knowledge-based support service for management.

- The Finnish National Agency for Education examines the obligations of ECEC and education providers to produce data as well as the needs and obstacles to the utilisation of data.
- The Finnish National Agency for Education examines the need for support material and continuing education related to knowledge management in the sector.
- Continuing education organised by the Finnish National Agency for Education strengthens and equalises the knowledge management competence of education and training personnel.

MINISTRY OF EDUCATION AND CULTURE
FINLAND

P.O. Box 29 FI-00023 Government, Finland
Tel. + 358 295 16001 (switchboard)
okm.fi/en

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