



HARIDUS- JA  
TEADUSMINISTEERIUM

# **Comprehensive NQF - a way to strengthen permeability and promote lifelong learning**

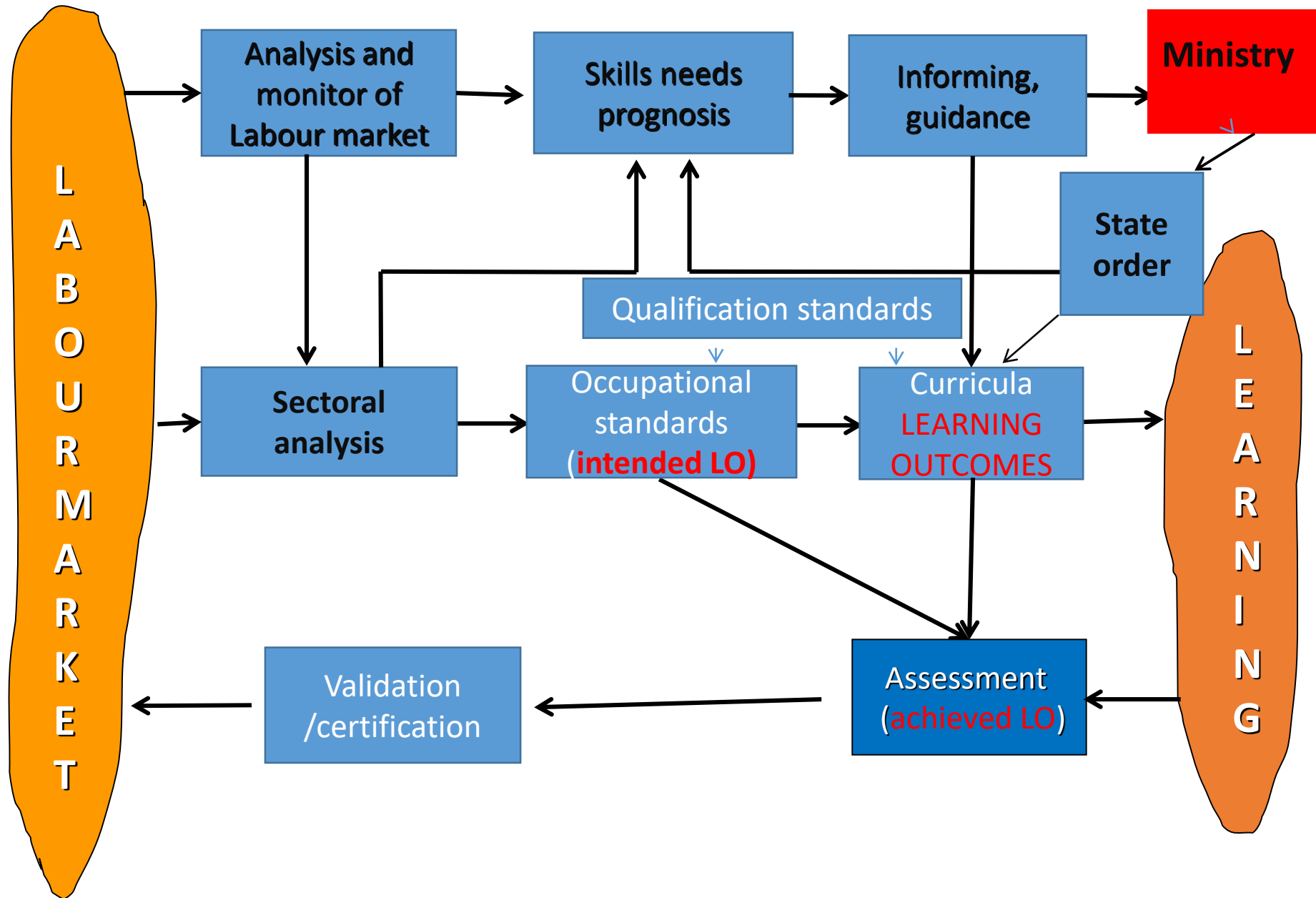
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Ministry of Education and Research

Deputy head of adult education department

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# **Why qualification framework?**

## **Recognition of learning: formal, non-formal, informal**

- recording of achievements of individuals arising from any kind of learning in any environment;
- to make visible an individual's knowledge and skills so that they can combine and build on learning achieved and be rewarded for it

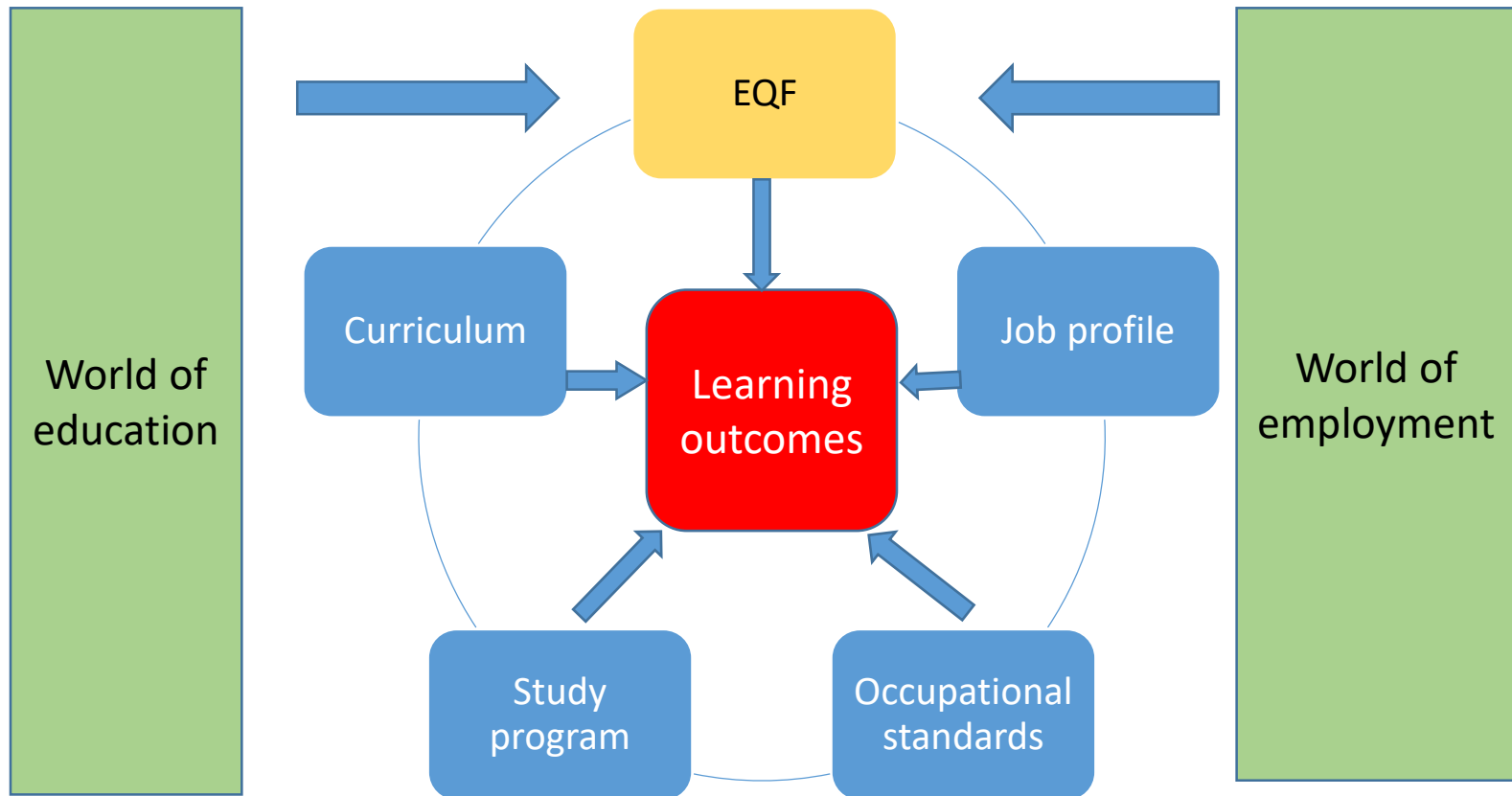


# Estonian qualifications framework

- EstQF is an **overarching framework**
- EstQF consists of **four sub-frameworks**: for general education, VET, HE and occupational qualifications with **sub-framework specific descriptors and relevant quality assurance systems**
- EstQF **includes all state recognised qualifications**, which meet two criteria:
  - Are defined in learning outcomes-based qualifications standards (curriculum or professional standard)
  - Awarded by nationally accredited institutions



# LO as common language



## Learning outcomes approach

Programme defined by learning outcomes of the individual learner

Assessment of outcomes through criteria based on each learning outcome

Comprehensive coverage of outcomes

Duration of learning depends on learner

Proven competent

Qualified

Programme designed for teaching in an institution

Assessment of content based on description of programme

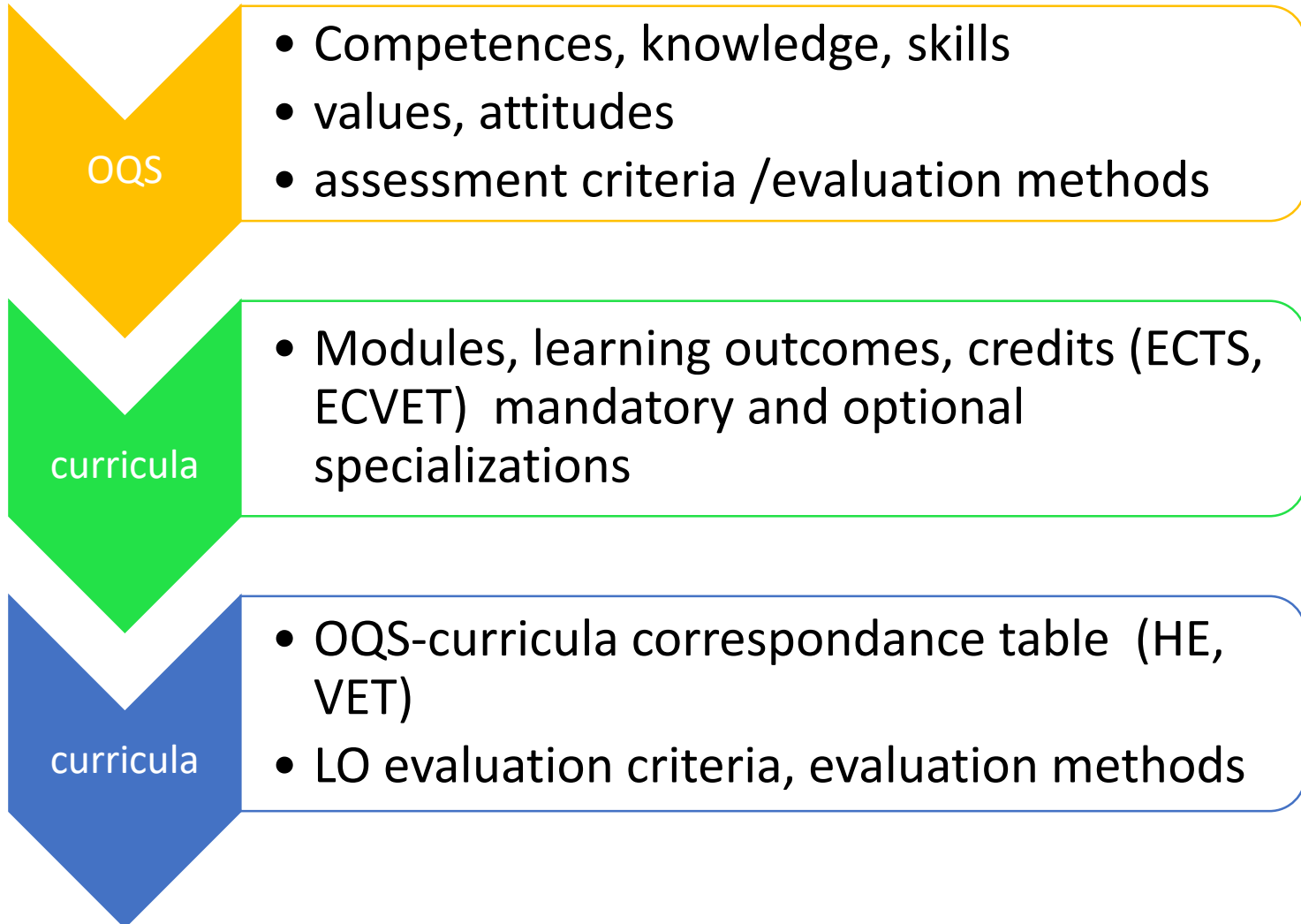
Excellent work can compensate for poor work

Duration of learning depends on institution

Declared competent

## Learning inputs approach

# From OQS to curricula



# Learning Outcomes:

## Standard Definition

“Learning outcomes are statements of what a learner knows, understands and is able to do after completion of learning.”

- describe what an individual can do\* relative to an agreed standard.
- specify what an individual is required to do\* in order to meet an agreed standard. \*including demonstrating knowledge and understanding



# LO: Forms and uses

## OUTCOME STATEMENTS

- to describe or specify occupational standards levels and/or requirements in other hierarchical and progression-related structures (related to sectors, competence, jobs, etc)
- curriculum aims the aims and/or targets of syllabuses or learning programmes

QUALIFICATION/CREDENTIAL OUTCOMES to specify the requirements for a specific award

LEVEL DESCRIPTORS to describe the indicators of level in a qualifications framework

# Educational standards and EstQF

General trend of development – **towards learning outcomes based standards:**

- Higher education standard (2008; 2019)
- Vocational education standard (2009; 2019) + national curricula for VET
- National curriculum for basic school (2010)
- National curriculum for upper secondary school (2010)
- New generation of occupational standards (2010-...



# Writing learning outcomes

## Common principles in writing

### The basic structure of learning outcomes statements

learner

action verb to  
signal the level  
of learning  
expected

the object and  
scope of  
learning, notably  
by identifying  
relevant learning  
domains

the occupational  
and/or social  
context in which the  
qualification is  
relevant

Assessment (criteria) - dialogue between intended and actual outcomes

# Writing learning outcomes

Local adaptation - political and practical implications  
balance and combine general subjects with transversal skills and occupation specific knowledge, skills and competences.

Width of qualification – level and complexity of learning

# Vocational Education Standard

<https://www.rigitatsja.co/en/eli/ee/515012020003/consolide#:~:text=The%20regulation%20establishes%20a%20set,and%20thei%20connections%20to%20the>

Definitions of descriptors: The learning outcomes for core and elective studies modules are described through vocational and professional knowledge, skills, extent of independence and responsibility, learning competence, communication skills, self-determination competence, performance competence, information technology competence and initiative and entrepreneurial competence, which are defined as follows:

- 1) **vocational and professional knowledge** is information acquired in the course of the study process regarding vocational, professional and occupational facts, principles, theories and practices;
- 2) **vocational and professional skills** are the capability of applying knowledge and using them for performing duties and resolving problems; the skills are described through their complexity and diversity;
- 3) **the extent of independence and responsibility** is the level at which the graduate is able to work independently and take responsibility for their performance;
- 4) **learning competence** is the ability to manage his or her learning activity using learning strategies and a suitable learning style;
- 5) **communication competence** is the ability to communicate orally and in written form in different situations and on different topics;
- 6) **self-determination competence** is the ability to understand and evaluate himself or herself, make sense of his or her actions and behaviour in society, develop his or her personality;
- 7) **performance competence** is the ability to visualize problems and solve them, plan his or her activities, set goals for activity and envision the expected results, select methods, take action, evaluate the results of his or her activities and engage in cooperation;
- 8) **information technology competence** is the ability to skilfully and critically use information technology devices and digital media;
- 9) **initiative and entrepreneurial competence** is the ability to act in a proactive and creative way and plan his or her career in the contemporary economic, entrepreneurial and work environment, using the acquired knowledge and skills in different walks of life and areas of activity.

(9) The general studies modules determine the common learning outcomes in study in key competences for all vocational secondary education curricula.

# The Estonian Qualifications Framework and the Vocational Education Standard

- Benjamin Bloom's taxonomy of learning domains and categories were used for assessing/describing learning outcomes:
  - Cognitive domain (intellectual skills and knowledge)
  - Psychomotor domain (manual or physical skills)
  - Affective domain (reception, values and attitudes)
- Also, the following were used: the 2005 version of the EQF, draft of the Basic Education Curriculum, Higher Education Standard, Scottish and British qualifications frameworks

# Learning outcomes for fourth-level vocational training

(1) A graduate of fourth-level vocational training shall have achieved the learning outcomes set out in this section.

- (2) Vocational and professional knowledge: knows and is familiar with the vocation and profession thoroughly, including knowing and applying the vocation's principles, theories and technologies in both conventional and novel work situations.
- (3) Vocational and professional skills and extent of independence and responsibility:
  - 1) is able to independently fulfil, in his or her vocation or profession, work duties that require complicated and diverse, novel solutions;
  - 2) is responsible for fulfilling work duties.
- (4) Learning competence:
  - 1) learns and updates his or her knowledge independently in a self-guided manner;
  - 2) assesses and analyses his or her level of knowledge.
- (5) Communicative competence:
  - 1) substantiates his or her standpoints in detail and expresses them in various situations orally and in writing;
  - 2) uses specific information sources in resolving vocational and professional issues, evaluates the reliability and veracity of the information.

- (6) Self-determination competence:
  - 1) uses self-assessment for changing his or her behaviour;
  - 2) is capable of making proposals for improving work results.
- (7) Performance competence:
  - 1) takes effectively part in different teams and is capable of leading the teams where necessary;
  - 2) is capable of partially supervising co-workers.
- (8) Information technology competence:
  - 1) knows the role, possibilities and potential risks of information technology;
  - 2) is able to critically assess the reliability of available information;
  - 3) is able to use the main computer applications and the possibilities of the internet for both personal and professional purposes;
  - 4) is able to apply tools for creating, presenting and understanding information and to use internet-based search systems and other services.
- (9) Initiative and entrepreneurial competence:
  - 1) thinks systematically and creatively and is able to critically assess his or her ideas and independently find possibilities for executing them;
  - 2) initiates, develops and applies ideas;
  - 3) has basic knowledge in entrepreneurship;
  - 4) prepares, under supervision, a short-term and long-term career plan for himself or herself;
  - 5) independently finds ways for professional self-improvement and application on the labour market;
  - 6) associates, under supervision, the requirements for professional training with possibilities for working on the labour market.



# Knowledge

Level 2	Knows and can describe primary concepts and principles • within the vocational and professional area Can understand the main processes of the job, knows • professional terminology, materials, tools and the most frequently used equipment
Level 3	Knows and understands vocational and professional • terminology, principles, <b>technologies</b> , processes, <b>techniques</b> , materials, tools and equipment and terminology, and can <b>use and apply</b> them
Level 4	Has a <b>thorough</b> understanding of the vocation, also, • knows and can <b>apply</b> principles, theories, technologies of the vocational area in both common and <b>new</b> work situations

# Skills/ scope of autonomy and accountability

Level 2	<ul style="list-style-type: none"> <li>•Can perform <b>routine</b> and common tasks of limited responsibility in the vocational area</li> </ul>
Level 3	<p>Can <b>independently</b> perform varied tasks in the vocational area and is • responsible for their completion in work situations performs to a <b>consistently good standard</b>•</p>
Level 4	<p>Is able to independently perform <b>complicated and varied</b> vocational tasks • where novel approaches can be expected Takes responsibility for completing job tasks• <b>Applies</b> principles, theories and technologies of the vocational area in • common and <b>novel</b> work situations Is able to make recommendations for the improvement of work • performance and supervise colleagues Is able to take partial responsibility for training colleagues•</p>

# Learning competence

Level 2	Requires advice and guidance during learning• Can resolve vocational and professional problems using • information materials provided
Level 3	Autonomous learning and self-improvement• Resolves vocational and professional problems using • sources of information that are widely available
Level 4	Can evaluate and analyse one's level of knowledge• Can apply self-directed and autonomous learning• Resolves vocational and professional problems using • specific sources of information Can evaluate the reliability and validity of information • used

# .Communication/personal competence

Level 2	<p>Can communicate according to circumstances and people involved •</p> <p>Can adjust and cope in different social environments •</p>
Level 3	<p>Can express one's ideas and justify one's views in different situations orally and in writing •</p> <p>Can find optimal solutions to professional problems and adjust one's behaviour accordingly •</p>
Level 4	<p>Can express one's views and explain them in detail in situations new to them •</p> <p>Can use self-assessment to change one's behaviour •</p>

# The standard of HE

<https://www.riigiteataja.ee/tolkelisa/5240/9201/4013/1.pdf#>

1.1. In order to be awarded a bakalaureusekraad, a student shall: - have a systematic overview of the basic concepts, theoretical principles and research methods of the field of study; - be able to identify interdisciplinary relationships; - understand the scopes of application of different specialities of the field of study; - know the theoretical schools, development trends and current problems of the field of study; - be able to formulate problems relating to the field of study and to analyse and evaluate different solutions; - be able to collect information independently by using appropriate methods and means and to interpret it critically and creatively; - be able to select and use appropriate technologies and methods when solving problems of the field of study, and, among other things, be willing to participate in team work and lead it; - have command of the communication skills and information and communication technologies necessary for work; - be able to explain orally or in written form in the language of instruction and in at least one foreign language problems relating to the field of study, and to participate in professional discussions; - be willing to actively participate in the civil society and demonstrate tolerance towards diversity of attitudes and values; - be able to evaluate the role of knowledge and the role and consequences of his or her professional activities in society, with consideration of scientific, social and ethical aspects; - be able to apply the acquired knowledge and skills in work, to continue studies and to undertake continuous independent professional development.

# What level?

- Comparative framework focus not on whether a particular qualifier meets a particular description, but how it relates to other qualities
- Descriptor framework - only the qualities corresponding to the descriptors at the same level

# Main challenges

- How knowledgeable is learner? Do learners and students see outcome-descriptions as meaningful and can relate to them
- What does employer looking for?

Does employers understand and acknowledge LO?

transparency and comparability; PIAAC results

- Adult learning – mass of providers /balance between social/occupational competences /VNFIL
- Frameworks – DicComp2, language etc ?

# Policy Opportunities and Challenges of recognising learning

## **Opportunities:**

- Harnessing the human resource potential of citizens:
  - improving access to, and mobility within the labour market
- Enhancing individuals' employability by facilitating workers' participation in formal education and training or by enhancing appreciation of their existing skills in the workplace
- Overcoming social, cultural, economic inequity





# Recognising learning: **Challenges:**

## **TRUST- QUALITY**

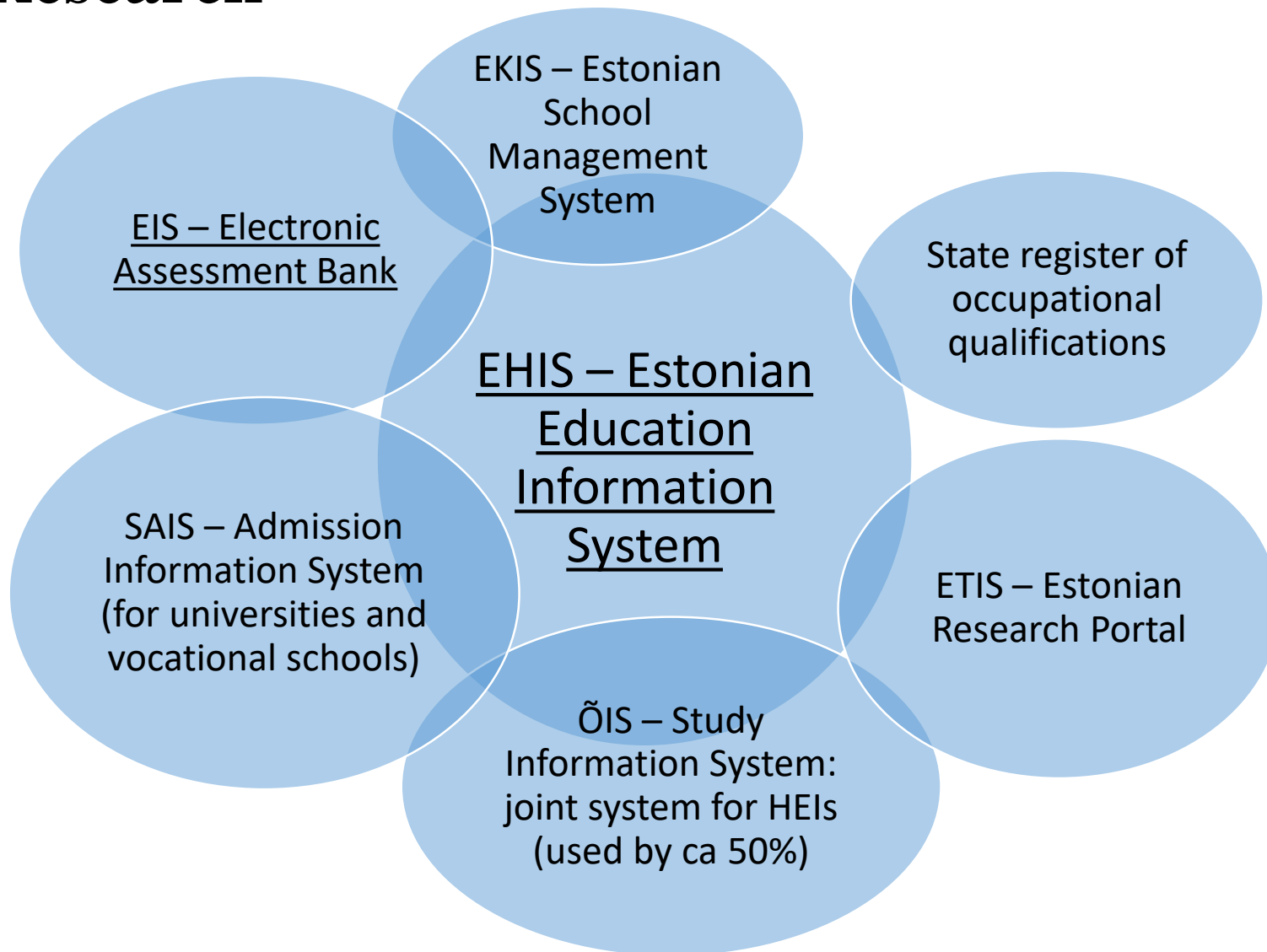
- gaining the acceptance of the labour market
- sensitive handling of the process of assessment and attention to the content of the certification produced;
- a risk of dissatisfaction among those who have undergone longer education when work colleagues whose knowledge has been acquired in working life have the same status



# Elements for data fields for the electronic publication of information on qualifications with an EQF level

DATA			Required/Optional
Title of the qualification			Required
Field <sup>(*)</sup>			Required
Country/Region (code)			Required
EQF Level			Required
Description of the qualification <sup>(*)</sup>	Either	Knowledge	Required
		Skills	Required
		Responsibility and autonomy	Required
	Or	Open text field describing what the learner is expected to know, understand and able to do	Required
Awarding body or competent authority <sup>(*)</sup>			Required
Credit points/notional workload needed to achieve the learning outcomes			Optional
Internal quality assurance processes			Optional
External quality assurance/regulatory body			Optional
Further information on the qualification			Optional
Source of information			Optional
Link to relevant supplements			Optional
URL of the qualification			Optional
Information language (code)			Optional
Entry requirements			Optional
Expiry date (if relevant)			Optional
Ways to acquire qualification			Optional
Relationship to occupations or occupational fields			Optional

# Centrally managed information systems in the field of the Ministry of Education and Research



# **EHIS - Web based info system, that:**

- was established on 2004 - [www.ehis.ee](http://www.ehis.ee);
- contains data on education from the original source (core provider), has input from approx. 2,000 institutions: educational institutions, publishers, other registers;
- contains personalized (live) data;
- is accessed only by ID-card;
- cooperates with over 20 different information systems;
- has approx. 45 x-road live services open.



# EHIS

**is organised in six modules:**

- 1) documents certifying education;
- 2) pupils and students
- 3) teaching staff;
- 4) educational institutions;
- 5) textbooks;
- 6) curricula

**contains information about:**

- early childhood education
- general education
- vocational education
- higher education
- interest in education
- juvenile committee decisions;
- state examinations;
- adult education (since spring 2016)

# EHIS is used for:

- **making policy and financing decisions in education** and other tasks arising from law.
- State and International educational **statistics**: UNESCO, OECD, Eurostat.
- **Monitoring the progress** of the Lifelong Learning Strategy: indicators
- Other **analysis and studies** of developments in education, including background data and samples for research.



# EHIS is used for:

- **x-road based services**
- For **quality assurance** in higher and vocational education: background data for internal evaluation report.
- **educational institutions** and school owners have access to all of their data and data concerning their students and teachers.
- **The public sees the EHIS data** via the *HaridusSilm* */Educational Eye/* visual education statistics database.



# Main X-road services with EHIS, see <https://www.eesti.ee/eng/>

- Directed to **individuals**:
  - submitting **application for VET and higher education via SAIS**;
  - applying for **needs-based study allowance**;
  - getting discount in public transport: **ID-ticket**;
  - getting **study loans** via banks; etc.
- Directed to **governmental organisations**:
  - **Local governments**: for planning school network and calculating headcount money’;
  - **Health Insurance Fund** (decisions about insurance cover);
  - **Social Insurance Board** (for calculating family benefits);
  - **Citizenship and Migration Board** (residence learning data);





# HaridusSilm / EducationEye:

[www.haridussilm.ee](http://www.haridussilm.ee)

- Runs on QlickView platform;
- Consists data about all educational levels; research; educational expenditures; teachers salary; ...
- First idea was to ease the work of analysts and thus, to cut costs;
- New views are created based on external demand (most demanded data from previous years) and on internal regular needs (steering policy aims): e.g. Teachers' salary analyses
- NEW! Activity and **performance indicators** at school level. Accountability with high autonomy. For self-assessment and mutual learning, parents' empowerment,...
- NEW! „**The labour market success**“: graduates' salary and employment,



# Electronic Assessment Bank EIS

- EIS is an electronic system which provides an opportunity to authorise e-items and perform e-tests.
- EIS is an input for school assessment.
- Main goals:
  - to **supply** high-quality items and tests in all subjects and provide wider access for usage;
  - to **encourage** usage of e-tools in the learning process;
  - to **modernise** and update existing testing tools;
  - to **raise** the interest to different forms of assessment.





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Thank You!

