Individual method

Self-assessment of digital maturity of the school

Kerli Požogin, Education and Youth Board of Estonia (Harno)
March 2023

1. Aims

The aim of implementing a self-assessment digital maturity model is to give the schools, in addition to the whole school assessment, a basis for determining the focus of the digital development project. The method is suitable to be used in phase *4. Mapping development needs* of the school mentoring process.

2. Description

The theoretical basis for the creation of the digital maturity assessment model is based on the concept of the three areas of school digital innovation, developed in parallel and closely interlinked, by Michael Fullan, a Canadian professor of school innovation. These areas of digital maturity are:

- **Pedagogy**: change in the way we learn, pedagogical innovation through the use of digital technologies;

- **Leadership**: change management at school level, learning from each other's experience, ensuring sustainability of change;

- **Digital infrastructure**: developing the school's digital infrastructure, ensuring digital security and user support.

The elements of the Estonian digital maturity self-assessment model are introduced in Table 1.

Table 1. The Estonian digital maturity self-assessment model

1.Pedagogical innovation	
1.1 Digital age practices	Changing and widening pedagogical repertoire, including inquiry, discovery, problem- and project-based, self-directed, creative and collaborative learning practices. Orchestrating digital age learning in classroom and outside.
1.2 Digital competences	Redefining and developing digital competence of teachers and students in the context of teaching and learning; continuous professional development and organisational learning on digital competence.
1.3 Changing teachers' role	Enhancing networking and collaboration among teachers to conduct, analyse, share, and evaluate innovative practices. Interdisciplinary peer teaching. Learners are engaged in self-directed, creative, and collaborative learning, they take responsibility for designing and implementing learning experiences, resources and environments as well as assessments
1.4 Changing learners' role	Creative, collaborative, self-directed learning
1.5 Structural changes in curriculum, learning environment	Systemic and sustainable structural changes in physical and digital learning environments, learning resources, time management, scheduling, workflows
2. Change management	
2.1 Strategic planning	Consensus-based, well-defined strategy and action plan for implementing innovation that guides the decision-making both in shorter and longer time scale
2.2 Participatory management, Partnership	School leaders involve continuously teachers, students, parents and external partners in decision-making processes related to planning, implementing and evaluating educational change
2.3 Learning organisation	School leaders, teachers, and students learn from each other; they document and disseminate good practice related to ongoing change process

https://www.facebook.com/ihub4schools   https://www.ihub4schools.eu/

2.4 Monitoring and analytics	School is using a set of valid and reliable indicators, data collection instruments and methods/practices for continuous monitoring and analytics of the change process
2.5 Leadership stimulates	School administration provides leadership, support and incentives to facilitate the implementation of change
3. Digital infrastructure	
3.1 Networks	Well maintained functioning and security of the school's network(s), regularly reviewing and enforcing the digital safety regulations (e.g., Acceptable Use Policy)
3.2 Digital devices	One-to-one computing anywhere anytime, ubiquitous access to digital devices (tablets, laptops, robotics), connected presentation and communication tools
3.3 IT management	Strategic planning of digital infrastructure, continuous monitoring and analysis of implementation of the plan
3.4 User support	Technical and pedagogical support to all users of digital technologies provided by school
3.5 Software and services	Well-maintained, licensed, up-to-date and interoperable ecosystem of software, services and information systems that supports the pedagogical change

3. Context

This method was used in an Estonian mentoring case and was carried out as an assignment during the school leaders digital training program (39 hours) in addition to other pedagogical aims. Leadership digital training consists of key topics about digital technology (digital safety and infrastructure, digital competence in school curricula etc.) and digital development project implementation. Altogether 20 people from 6 schools participated in the assignment to analyse their school's digital maturity.

4. Requirements for implementing and resources needed

Digital maturity self-assessment online survey has to be set up with following possibilities:

- since the analysis is based on specific measurements and scales, it takes time and the school team has to have a possibility to save their in progress survey answers.

- the chosen online platform should have a possibility to send the results for the team also, so they can carry on working with the analysis of the schools digital maturity regularly after the digital training.

5. Structure

The method incluses the following phases:

A. Introduction of the assignment for the school teams (in this case at the end of the first contact seminar).

B. Working in groups within their school teams for two weeks to fill out the self-assessment survey.

C. Overview of the results from the educator at the beginning of the next contact seminar.

D. Working in groups to finalise their schools projects ideas based on the digital maturity self-assessment survey results.

E. Group presentations about the project ideas and the lessons learned from the digital maturity self-assessment assignment.

F. Schools carry on working on the digital development projects between and during the next three contact seminars.

Figure 1 gives an overview of Digital maturity self-assessment results (arithmetic average) based on online survey answers from six schools.

School teams assessed previously described items on the scale 1-5, where:

1 Exchange—refers to episodical implementation of digital innovation, rare cases of using digital technology;

2 Enrich—refers to the coordination within the school, digital technology is used to experiment new teaching and learning methods; teachers share their experiences;

https://www.facebook.com/ihub4schools   https://www.ihub4schools.eu/

3 Enhance—refers to the changes in the learning and teaching processes, systematic, evidence-based changes on a school level;

4 Extend—refers to widening digital culture, combined technologies are normal part of the school, students are creators and leaders of their personal digital spaces;

5 Empower—refers to leverage and acting as a regional leader in some certain aspects of digital innovation. The school's digital learning services are being extended beyond the school, with the introduction of agile (adaptive, flexible) ways of learning, students taking responsibility for their own learning pathways and, to some extent, for the learning of others.
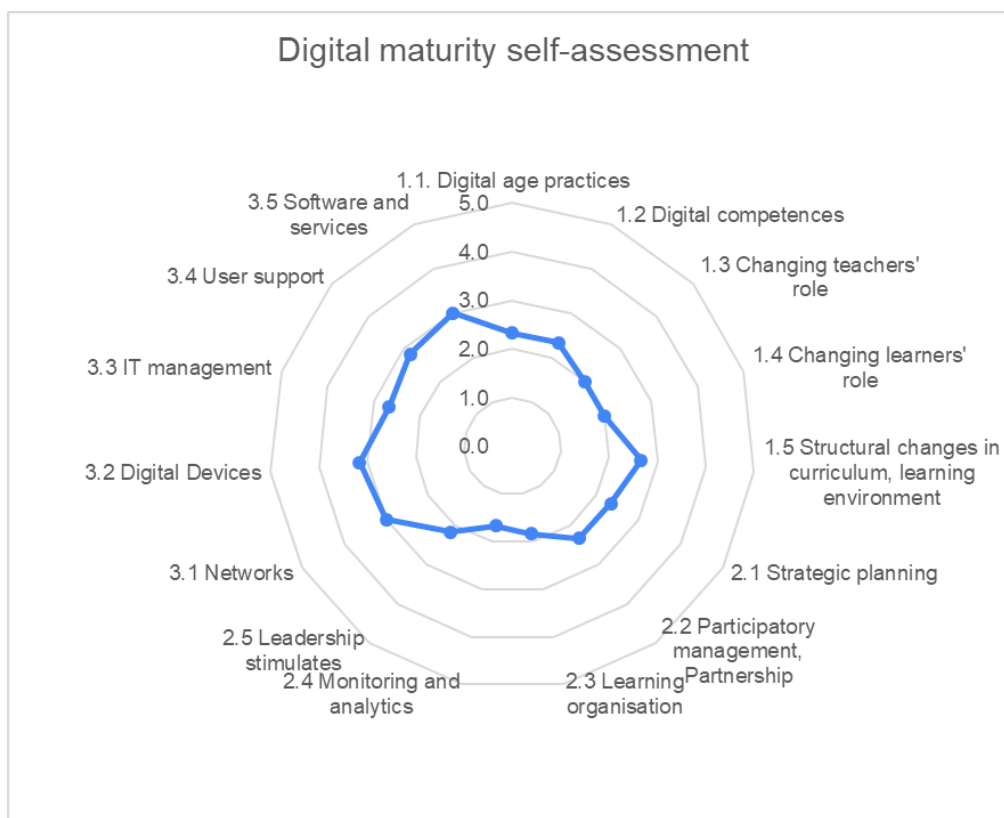

Figure 1. Digital maturity self-assessment results (arithematic average) based on online survey answers of six schools.

https://www.facebook.com/ihub4schools   https://www.ihub4schools.eu/

6. Actions after implementing the method

Digital maturity self-assessment should become a tool for the schools educational technologist, who will use the model to analyse the different aspects regularly based on the overall strategic purposes of the school.

7. Recommendations

Digital maturity self-assessment analysis has to be a group effort consisting of key persons responsible for the changes in the school's digital pedagogy, leadership and digital infrastructure. This way the analysis has a much broader effect and is an incentive for other much needed changes within schools.
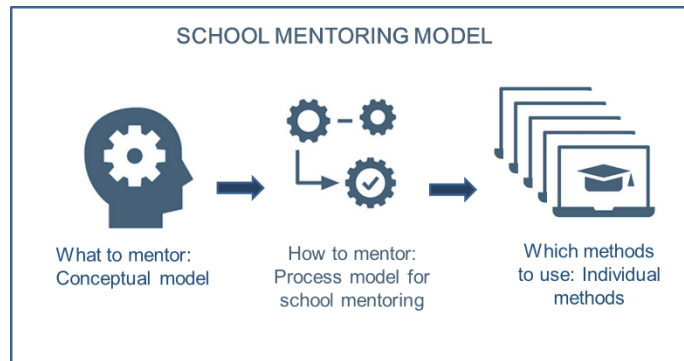
It has to be emphasised for the school teams that it is a self-assessment and the aim is not to provide a better picture about the schools, but to realise the areas that need improving and/or changes.

Some focus should be put on explaining to the school teams that the digital development of the school is not something that is separate from the overall school strategic goals and leadership, learning and teaching processes, or infrastructure. Digital technology is a tool, not a purpose itself.

https://www.facebook.com/ihub4schools   https://www.ihub4schools.eu/

This material is part of the School mentoring model

The aim of the model is to foster the adoption of digital innovation at school level.

The focus is on teachers' understanding of digital technology and practices to implement technology in a pedagogically meaningful way.

SCHOOL MENTORING MODEL

What to mentor: Conceptual model

How to mentor: Process model for school mentoring

Which methods to use: Individual methods

The model promotes teachers' professional learning with peers and school management to create the culture and practices for evidence-informed implementation of digital innovation.

The model is created in the iHub4Schools project (2021-2023).

Tallinn University

University of Helsinki

Vilnius University

University of Bergen

STePS

University College London

École polytechnique fédérale de Lausanne

Estonian Education and Youth Board

Batumi Shota Rustaveli State University

https://www.facebook.com/ihub4schools

https://www.ihub4schools.eu/