Framework of digital competencies for the self-assessment tool

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Report for EngLife - IO3 - Self Assessment Tool

About the report

This report is generated to showcase the acceptance of the Self assessment tool. This report is created within the Intellectual output 3 by the International School, Serbia.

The EngLife project focuses on developing a framework and a digital tool on how to evaluate basic skill framework for digital competence assessment for teachers across Europe.

In order to make the project activities and results as well founded and transnationally sustainable as possible, it was necessary to involve teachers working with the tool in the form of a survey-based assessment as well as researchers with the interest and possibility to further develop the use of the Self-assessment tool at their own institutions and beyond.

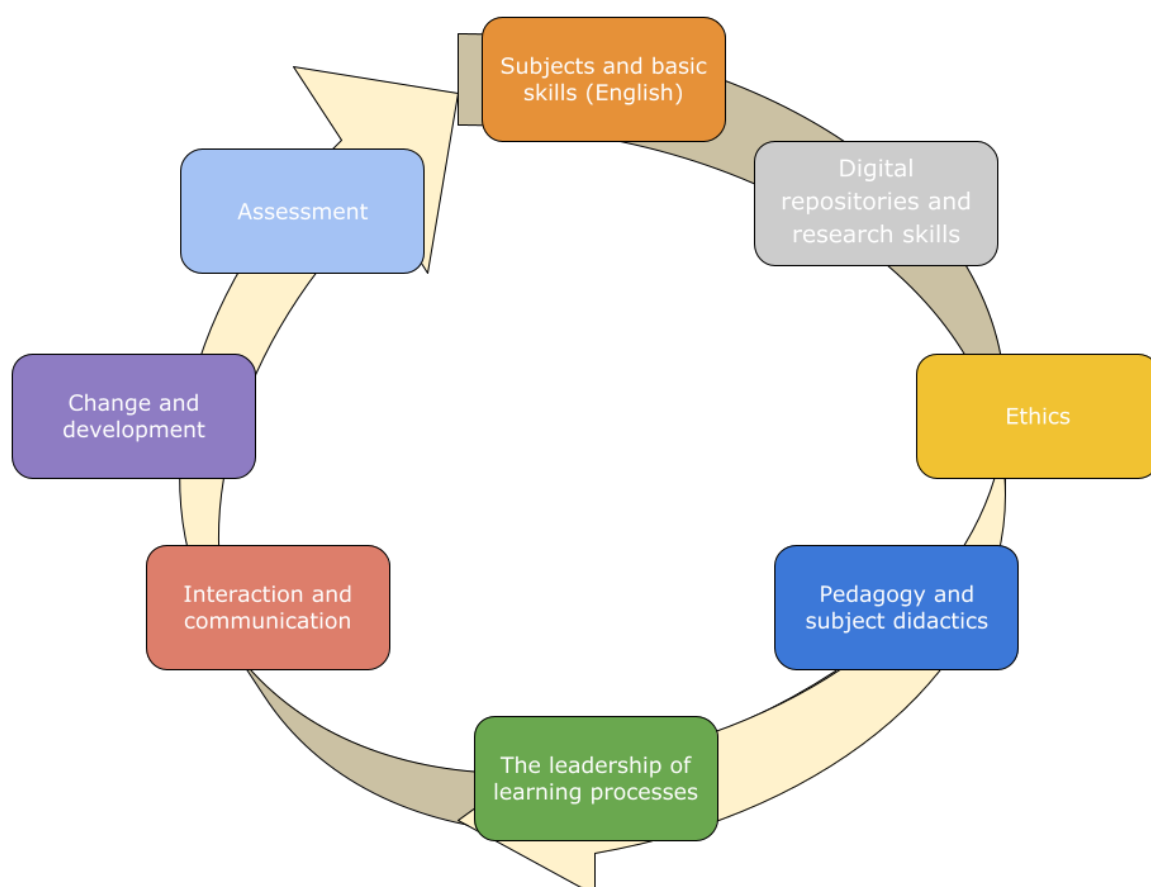## Framework of digital competencies for the self-assessment tool

The proposed framework is generated from secondary research data and applied to the specific usage of the self-assessment tool to showcase the variables needed for the teachers to respond to, upon self-assessing their skills. The framework below is inserted from the document *Self-Assessment of Digital Competencies of an English Language Teacher for the Future Proposal,* created by International School prior to the development of the Self-assessment tool.

The proposed framework for self-assessment of digital competences is shown in Figure 1 and based on the eight competence areas:

1. Subjects and basic skills (English);
2. Digital repositories and research skills;
3. Ethics;
4. Pedagogy and subject didactics;
5. The leadership of learning processes;

6. Interaction, and communication;
7. Change and development;
8. Assessment;

which represents a basic skill framework for digital competence. All of the areas of competence are equally important, but it is the sum of the competence areas that makes up a professional, digitally competent teacher.

Figure 1. Amended framework for digital competencies

Self-assessment of the digital competences is dynamic and complex, and influenced by developments in society. The framework proposed in these papers should be updated regularly, based on the influence of digital

developments and different novel research in the domain of teaching profession and education system in general.

The framework on digital competencies is created based on the the Norwegian Directorate for Education and Training revised its Basic Skills Framework from 2012 and it mandates that all teachers should have basic digital competencies within their education program to be able to further grow them in life and use them in their profession.
Based on the proposed framework, teachers would self-evaluate and ensure that adjustments to their knowledge and skills are made according to the ongoing IT trends in education.

Later in the document **Self-Assessment of Digital Competencies of an English Language Teacher for the Future Proposal** it is described which particular questions are needed to be answered by the teachers to self assess.

Questions for the self-assessment of digital competencies - REVISED

Each of the eight categories proposed in the framework for digital competences will have suitable questions which will be based on that category. In this paper we want to propose the types of questions for each of the categories. The idea is to have the same number of questions for each category. Our proposal is to have six questions per category which will be used for self-assessment of the digital competences. These questions will be based on the *SELFIE tool* and *Professional digital competence framework for teachers* paper [1,3].

Subject content and basic skills (English)	*I search online for digital educational resources.* *I create my own digital resources to support my teaching.* *I use and adapt open educational resources.* *I use virtual learning environments with students to reinforce both communicative*

	and digital skillsThe use of digital technologies has a positive impact on my students acquiring new grammatical and lexical knowledge. ● *The use of digital technologies has a positive impact on my students developing language skills in a more natural way.*
Digital repositories and research skills	● *I share my digital materials/plans/methodologies with other English teachers.* ● *I easily learn to navigate a new digital tool.* ● *I choose relevant digital tools and resources based on research findings or reviews.* ● *I often combine different technologies together to provide the best possible learning outcomes.* ● *I encourage fellow teachers to use digital repositories and tools, and offer my assistance.* ● *I am confident in incorporating a variety of digital tools in my teaching, even those that have not been designed solely for educational purposes.*
Ethics and safety	● *I tend to keep personal information online hidden from the public.* ● *I use privacy settings on my browser and know where to look for privacy settings on social media platforms, browsers, etc.* ● *I can fact check the information I access online and am able to distinguish reliable from unreliable information and sources.* ● *I am familiar with VPN (virtual private network services) and I have been using them at most times.* ● *I use strong and non-repetitive passwords (more than 15 characters without a meaning).* ● *I purchase only from secure sites (secure = lock on the left side of browser area)*

Pedagogy and subject didactics	● *I use digital technologies to tailor my teaching to the individual needs of my students.* ● *I use digital technologies to foster students' creativity.* ● *I set digital learning activities to engage students.* ● *I use digital technologies to facilitate student collaboration.* ● *I use digital technologies to teach cross-curricular content.* ● *I use digital technologies (podcasts, online courses, videos) to get acquainted with new teaching methodologies and approaches.*
The leadership of learning processes	● *My leadership skill does not appear in major learning processes.* ● *I successfully apply my personal leadership experience into my teaching.* ● *I feel able enough to promote learning in a classroom with integrated students.* ● *I try to develop better ability in managing learning processes with the aim of making my institution more organised.* ● *My leadership skills involve understanding of mastering learning processes.* ● *I feel able to express a view about the process of learning, exercising full control on it.*
Interaction, and communication	● *I discuss the advantages and disadvantages of teaching and learning with digital technologies with my students.* ● *I use digital technologies in my partnerships with other teachers/organisations.* ● *I collaborate with other schools or organisations to support the use of digital technologies.* ● *I use digital technologies for school-related communication.* ● *I discuss with students their favourite digital*

	tools and try to apply them to my teaching. • *I discuss the usage of digital technologies with my colleagues and school leadership.*
Change and development	• *I have opportunities to participate in the continuing professional development for teaching and learning with digital technologies.* • *I have the continuing professional development opportunities on the use of digital technologies that are specific to the subject and age group that I teach.* • *My workplace encourages the exchange of experiences in teaching with digital technologies within the school.* • *My workplace supports and fulfills my needs for the continuous professional development regarding teaching with digital technologies.* • *My workplace has a budget for new digital technologies, and I actively use it to explore new tools for teaching.* • *I educate myself on digital technologies and their usage in my free time.*
Assessment	• *I use digital technologies to assess students' skills.* • *I use digital technologies to provide timely feedback to students.* • *I use digital technologies to enable students to reflect on their own learning.* • *I use digital technologies to enable students to provide feedback on other students' work.* • *My workplace supports me in using digital technologies for assessment.* • *I use multiple digital tools for assessment purposes.*

Table 1. Amended questions for self-assessment of digital competences categories

This online tool is aimed at helping the English language teachers check their level of knowledge and skill development with regard to implementing digital technologies in different stages and aspects of teaching. Upon answering all questions by ticking the boxes, the teachers will receive a score for each section, with the overall score being added up at the end of the questionnaire and represented in the following manner:

1. The teacher will be able to see what **digital competence category** they currently belong to based on the percentile score, with a short description of the profile. The descriptions are shown below.

Newcomers (0 - 20%) - making little use of digital technologies for instruction (does not or only rarely uses technology in class)
Explorer (20 - 40%) - making basic use of available digital technologies for instruction (uses digital whiteboards for projectors, ppt/slides)
Integrator (40 - 60%) - integrating available digital technologies for instruction (uses a variety of tools in teaching)
Expert (60 - 80%) - using digital technology purposefully to enhance pedagogic strategies (systematically enhances teaching)
Leader (80 - 90%) - orchestrating, monitoring, and flexibly adopting the use of digital technologies to enhance pedagogic strategies
Pioneer (90 - 100%) - using digital technologies to innovate teaching strategies (implementing innovative pedagogic strategies)

2. **The radar diagram** will outline the strengths and weaknesses of the teacher's digital competencies, showing the areas which require more development of competencies on teacher's part.

The maximum number of points available is 240. (Total) questions we can represent as *QSum (1)*, where *x* will represent the score for each question and *i* will represent the number of the question, with upper limit $n = 46$. The digital competence index *(DCI) (2)* will be calculated as:

$$Qsum = \sum_{i=1}^{n} x_i \tag{1}$$

$$DCI = (Qsum / Total) * 100 \tag{2}$$

The test takes up to 20 minutes to complete, and can be done multiple times as a self-evaluation instrument.

Gathering of information and collaboration with partners for IO3

Although multiple meetings were held between partners and the communication was flowing, the actual feedback for the given tool was lacking at first. The team from International School, Serbia was keen on finishing the task within the project time frame therefore initiated communication with the partners for assessing the tool when finished.

In the Table 1 above, we can find amended questions for self-assessment of digital competencies. The adaptation of the original proposition for the tool was made by the feedback provided by several partners. The duration of IO3 was over the period of 4 months, from November 2021 till March 2022.

The commentary about the tool included adaptation of the initial segment related to *Schools in society* to be adjusted into *Digital repositories and research skills* and rephrasing some of the questions to be understandable by anyone who takes the assessment. Other commentary revolved around the aesthetics of the tool itself and the visual effect it sets when placed on the website of the beholder.

All adjustments have been made as proposed by the partners and the tool is ready for further implementation.

Final comments

The tool for self-assessing digital competencies for English language teachers is ready to be tested and used by the partners to generate the online database of teachers and to be merged with the suitable methodology. Any teacher using the tool will find it highly beneficial in a form of self evaluation and a reminder to use digital technologies in their curricula. Teachers will be able to self evaluate their digital competencies multiple times if they wish to do so, as well as monitor their progression in the process of using digital technologies in the classroom.