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## **English Teachers' Digital Competences in a Post-COVID Classroom: A Case Study**

### **Abstract**

The article addresses the issue of digital competences observed among English teachers in the context of the post-COVID classroom covered by the time-frame from September 2022 to 2023. In order to check the level of professional digital competences (TPDC) of teachers, who, according to the current state of research showed a complete lack of such skills in the first period of the pandemic, a retrospective interview was conducted. Next, in September 2022, when the first school year without any COVID-19 restrictions began, the teachers underwent a detailed analysis of their competences *via* a questionnaire based on the European Framework for the Digital Competence of Educators (DigCompEdu), allowing them to self-mark (un)used digital skills during language lessons. Additionally, the teachers' state of knowledge and skills from this period were compared with their competences at a later stage, in September 2023, to check the impact of such factors as time, previous experience in using the skills and trainings completed on the teachers' functioning in the classroom. The study includes four teachers representing two primary schools in Poland. It demonstrates that the respondents' knowledge and use of modern technologies was negligible in the first period of the pandemic, as assumed, while their digital competences acquired later were a matter of time and the result of the courses they had attended. As the study participants exhibit different levels of proficiency, distributed unevenly over time, three distinct patterns in teachers' (non)development of the above-mentioned competences have been outlined. In addition, the profiles of teachers participating in the study have been constructed in line with the lists of determinants of teachers' digital proficiency proposed by the European Framework for the DigCompEdu.

Following the research findings, it is not the teachers' age, seniority or degree of professional promotion at school that influences their digital skills, but rather their basic knowledge, education and additional functions performed in an institution that immediately impact the level of modern technology competences. It is recommended to expand the research to measure the competences in question on a larger research sample, as well as to look at the very classroom situation from the point of view of actual skills (un)used by teachers during language instruction.

**Key words:** digital competences, English teachers, European Framework for the Digital Competence of Educators (DigCompEdu), a post-COVID classroom

A review of the research on the subject reveals that the concept of teachers' professional digital competence (TPDC) is difficult to define, as it may partly overlap with such commonly used concepts in the literature as digital literacy, media literacy, media competence or information and technology competence (Falloon, 2020). Given that TPDC is gradually being established in the educational research and has already been ascribed a multitude of definitions pertaining to teachers' competences in the context of technology-based teaching, the author of the article starts with offering the most suitable definition, one that aligns with the environmental conditions and participants of the study to be performed.

## **Definitions of TPDC**

In its broader terms, TPDC is defined as a series of interrelated aspects including teachers' technological competence, content knowledge, attitudes to technology use, pedagogical competence, cultural awareness, critical approach and professional engagement (Selwyn, 2011). To cut a long story short, Aznar & González (2010) and Ouma et al. (2013) argue that TPDC should be restricted to basic skills in both hardware and software to make teachers deal with digital resources easily. Following Krumsvik et al., (2016) TPDC is tantamount with teachers' elementary and basic skills as far as using technology for learning and teaching is concerned. The former refer to generic operational skills, such as turning a computer or an iPad on and off or using a word processor, whereas the latter are teacher-specific, such as handling "digital learning platforms and digital teaching aids attached to the curricula" (Krumsvik et al., 2016, p. 147). With regard to particular competences required of teachers, Badia et al. (2014) and Tomczyk (2019) enumerate browsing, retrieving, storing, producing, presenting, exchanging information and communicating on social networking sites. Ceana & Reddecker (2019) point to the

importance of teachers' skills in finding and selecting appropriate resources out of a vast range of programmes and applications, as well as making their own modifications depending on the content and learning goals of their classes. Olofsson et al. (2019) underline the fact that teachers also need to have skills to solve technical problems that may reappear in the classroom. Regardless of the scope of the above-mentioned activities, all the interpretations of TPDC seem to meet along the way for the purpose of emphasizing the teacher's ability to successfully use technology for teaching. What is more, all these descriptors of TPDC can be easily related to the DigCompEdu Framework referred to as a general reference frame to support the development of teacher-like digital competences in Europe.

### DigCompEdu Framework

According to the *European Framework for the Digital Competence of Educators* (2019), TPDC is divided into the following six competence areas, being further divided into three to five competences (Table 1):

Table 1.  
*Teachers' Digital Competences based on The DigCompEdu Framework*

Educators' professional competences	Educators' pedagogic competences		Learners' competences
1. PROFESSIONAL ENGAGEMENT	2. DIGITAL RESOURCES	3. TEACHING LEARNING	6. FACILITATING LEARNERS' DIGITAL COMPETENCES
<ul style="list-style-type: none"> <li>• organisational communication</li> <li>• professional collaboration</li> <li>• reflective practice</li> <li>• digital CPD</li> </ul>	<ul style="list-style-type: none"> <li>• selecting</li> <li>• creating and modifying</li> <li>• managing, protecting, sharing</li> </ul>	<ul style="list-style-type: none"> <li>• teaching</li> <li>• guidance</li> <li>• collaborative learning</li> <li>• self-regulated learning</li> </ul>	<ul style="list-style-type: none"> <li>• information and media literacy</li> <li>• communication</li> <li>• responsible use</li> <li>• problem solving</li> </ul>
	4. ASSESSMENT	5. EMPOWERING LEARNERS	
	<ul style="list-style-type: none"> <li>• assessment strategies</li> <li>• analyzing evidence</li> <li>• feedback &amp; planning</li> </ul>	<ul style="list-style-type: none"> <li>• accessibility and inclusion</li> <li>• differentiation and personalization</li> <li>• actively engaging</li> </ul>	

Source: DigCompEdu (2019).

Following Ceana & Reddecker (2019), the framework gives a few characteristics typical of any teaching process (area 1, 2 and 3), whether technologically-supported or not, and many details on how to make an efficient and innovative use of digital technologies when planning (area 2), implementing (area 3), and assessing (area 4) the process of teaching and learning *via* new technologies. In addition to that, area 5 takes into consideration the benefits of digital technologies for learner-centred education, and is transversal to the previous areas, giving guidelines complementary to all the skills enumerated.

### **Area 1: Professional Engagement**

This area underlines the need of teachers' ability to enhance teaching through efficient organization as a result of well-developed communication strategies (*organizational communication*), but also their professional interactions with colleagues, learners, parents and others in the form of sharing and exchanging knowledge and experiences, including pedagogic innovations (*professional collaboration*). Also, it includes teachers' skills in reflection on and evaluation of their digital pedagogical practices among others (*reflective practice*), as well as using digital (re)sources for continuous professional development as required (*digital continuous professional development*).

### **Area 2: Digital Resources**

This area deals with the teachers' ability to recognize, judge and select digital resources suitable for the process of teaching and learning, by means of carefully planning and adjusting them beforehand to a specific goal, context, and group (*selecting digital resources*). The key competences here are two-fold, i.e. connected with the teachers' ability to modify and adapt the already existing digital materials when permitted, and create, recreate and/or co-create new digital educational materials, in line with the needs of the classroom context, its participants, objectives and intended results (*creating and modifying resources*). Last but not least, the teachers are expected to be able to develop themselves digital resources and make them available to learners, parents and others as needed. At this point it is also crucial for teachers to protect sensitive data, and correctly use the privacy and copyright rules in particular (*managing, protecting and sharing digital resources*).

### **Area 3: Teaching and Learning**

The teachers' main competences lie in correctly orchestrating the use of digital technologies. Within the scope of *teaching*, the emphasis is put on experimenting

and developing new ways of digitally-based pedagogical instruction. In addition to that, the educators are required to use digital technologies and services while contacting students outside the classroom context. The next component, *Guidance*, translates into teachers using innovative forms and formats of digital means to offer help and assistance. Also, it is vital that teachers are able to enhance digital cooperation among learners by means of collaborative assignments through joint communication and knowledge production (*collaborative learning*). Finally, it is required of teachers to digitally monitor learner's self-regulation, consisting in helping them plan and execute their individual learning pursuits focused on progress, *via* sharing interesting insights and solutions (*self-regulated learning*).

#### **Area 4: Assessment**

This area is tightly connected with implementing widely-available assessment and correction techniques in a digital way. The first sub-component (*assessment strategies*) deals with teachers' ability to use technologies for providing a range of feedback as part of both formative and summative assessment, adjusted to learning. The second issue here is associated with teachers' actions directed at analyzing learners' digital data, whether in terms of their behaviour or progress, and using it to monitor a forthcoming learning process as well as its consequences (*analyzing evidence*). Again, on the basis of the learning evidence generated by digital technologies, the teachers are obliged to support learners in their outcomes using appropriate strategies available online, help parents understand the digital information stemming from learners' performance, and inform both parties about future plans (*feedback and planning*).

#### **Area 5: Empowering Learners**

This category, in broad terms, concentrates on using digital technologies to foster learners' active engagement in the learning process. The first key issue, called *accessibility and inclusion*, is addressed to teachers and their full readiness to involve all learners in a digital education, taking into account special needs of learners and their constraints to the use of technologies. Secondly, it is important for teachers to allow diversity in the classroom understood as working at a different pace and levels of difficulty, as well as following individual learning goals and objectives (*differentiation and personalization*). Lastly, the teachers are expected to use digital technologies to make all learners actively participate in the lesson, providing space for new, real-world contexts and topical issues. What is more, the class engagement is to be focused on creative activities, such as hands-on tasks, scientific investigation and complex problem-solving/decision making assignments (*actively engaging learners*).

## **Area 6: Facilitating Learners' Digital Competence**

This area focuses on learners' digital skills, although it also resembles teachers' digital competences and overlaps with the competences traditionally ascribed to educators. The starting point is *information and media literacy* described as learners' ability to "articulate information needs, to find information and resources in digital environments, to organize, process, analyze and interpret information, and to compare and critically evaluate the credibility and reliability of information and its sources" (DigCompEdu, 2019, p. 23). The second area, referred to as *digital communication and collaboration*, consists in learners being ready for using technologies to cooperate smoothly and participate eagerly in learning activities as well as citizen engagement outside the learning context. Third, the learners are expected to express themselves through digital technologies when on a task, as well as create their own digital content in multiple ways. Additionally, they are obliged to know all the license and copyright regulations, and apply them correctly to the digital data available (digital content creation). The next issue concerns responsibility while using digital technologies. It involves both the learners' physical and mental well-being, and them being empowered to manage risks connected with using technologies (*responsible use*). In case of problems, the learners are required to correctly identify and deal well with all technical issues, as well as use their technological knowledge to offer new solutions (*digital problem solving*).

## **Language Teachers and Integration of Digital Competences in the Classroom**

Building on Caena & Redecker (2019), digital technologies have profound implications for language teaching in the sense that much of students' language use outside the classroom is mediated through digitally. It thus seems legitimate to say that students should be able to use digital technologies to support first of all their learning experiences, but also their social contacts (Kessler, 2018). In fact, many recent studies have shown that not all teachers can afford that type of instruction due to lack of competences to use technology, while those who try to follow computer-assisted language learning face serious challenges, such as adapting their content, materials and mode of delivery to remote teaching (Carillo & Flores, 2020; Kim & Asbury, 2020).

## **The Polish Context before the COVID-19**

The 2018 EU Kids Online study conducted by Pyżalski et.al. (2019) showed that Polish students did not receive sufficient support from teachers in acquiring digital competences, e.g. the ability to verify the credibility of information found on the Internet (45.5% of students responded that the teacher did not explain why some Internet content is good and others are bad) or reacting to threats on the Internet (63.3% of students have not received help from a teacher in the past when a student was concerned about something on the Internet). Moreover, 44.5% of the surveyed students stated that the teacher never or almost never encouraged them to use and learn things from the Internet.

The situation was even more dire at the start of the pandemic, when the rapid and unexpected transition to distance learning did not allow much time for teacher training on the most effective teaching methods. This lack of professional digital skills was further accompanied by the lack of resource availability, adaptability and implementation.

## **The COVID-19 Classroom, Technology Use and Teachers' Professional Digital Competence**

According to Tomczyk (2021), the first stage of the pandemic in Poland was a time of crisis, because the majority of teachers had only intuitive knowledge of the methodology of distance learning. They did not receive adequate technical support, and had to gain e-learning skills through self-education, often by means of tutorials available on the Internet, and/or peer support with a constant concern about the quality of education. According to Śmiechowska-Petrovskij (2020), the next stage was the implementation of a synchronous teaching where the teacher's ongoing interaction with students and control of the learning process provided a substitute for regular (stationary) lessons. The results of the study conducted in Poland in June 2020 show that 42% of teachers switched from classes initially held asynchronously to synchronous ones, either in accordance with the time schedule or by an individual appointment by means of MS Teams, Zoom or Google Hangouts, with the help of videos and/or multimedia presentations as well as various educational websites offering interactive tasks. The second largest group of teachers (27%) constituted those who relied on the asynchronous mode of teaching and provided learners with e-materials for individual study. Next, 8% of the instructors surveyed used Skype, Messenger or even telephone calls to

contact the students and cover the material. Exactly the same results were obtained in the report commissioned by Librus (2020).

Taking no account of the previously-mentioned imperfections, it must be highlighted that teachers faced constant problems connected with the lack of structured linguistic content *versus* the abundance of online resources to evaluate before the lesson, students' lack of interactivity and motivation, as well as lack of social and cognitive presence to appropriately monitor the language instruction in the classroom. All that instilled negative emotions in teachers and blocked their professional development in terms of technology use in education (Papaja, 2021; Plebańska et al., 2020). There have been no studies describing the exact scope of digital competences of language instructors at the time of on-going pandemic education. Nevertheless, a lot of research on teachers' skills has demonstrated the benefits of courses and training in this area. To name an example, Pedagogical University of Krakow has been offering continuous in-service training courses for primary and secondary school language teachers. The courses in question cover basic issues related to creating educational content and operating the Moodle and Teams platforms (creating teams and channels, inviting students to remote meetings, enhancing student involvement in remote activities, starting from forming attendance lists, making presentations, desktops, and whiteboards available to using chat, class booklet, and tests) (Tomczyk, 2021).

### **Teachers' Professional Digital Competence in a Post-COVID Classroom**

The main assumption for conducting the present study is the expected impact of the ICT courses and teachers' self-education during the pandemic on the current state of teachers' professional digital competences. As Dycht & Śmiechowska-Petrovskij (2020) claim, the implementation of distance education and use of ICT has realized the potential of digital teaching to a small extent. On the one hand, the forced online education has highlighted the insufficiency of teachers' competences related to the usage of technological tools and digital resources, already visible much earlier, and, on the other, the whole situation has turned out to be "an accelerated course" for teachers in the field of information technology and interrelated issues. Consequently, as observed by Plebańska et al. (2020), the level of teachers' digital competences has increased, including, among others, their ability to use the ICT tools, such as searching for network resources, and interactive mechanisms to communicate and collaborate digitally. Another significant change was noticed in the improved level of equipment supply, and institutional support.



## The Study

Having proven that there is a correlation between the period of the pandemic classroom practice experienced by language teachers and the scope of digital skills they hold these days, the study has been designed to identify the teachers' acquired competences, whether independently or through formal training, and to create a post-COVID profile of a digitally-competent language teacher, differing in terms of seniority and experience. At the time of the research design there were few studies showing the state of knowledge and digital competences of (post)-pandemic teachers working in Polish schools that would show the current state of English teachers' TPDC and the impact of time on their potential (non)-development. The vast majority of studies focused on the well-being of English teachers during the pandemic and the emotions that accompanied this period (e.g. Papaja, 2021; Jelińska & Paradowski, 2021; Pawlak et al., 2021; Derakhshan et. al., 2022). Thus, the main aim of the current research has been to outline the situation before COVID-19, and detect areas of increase and/or decrease in teachers' digital skills experienced over a time-period. In order to focus on the above-mentioned goals, the following research questions have been formulated:

RQ1. Do the teachers under investigation confirm the lack of digital competences in the first period of pandemic education?

RQ2. Did the teachers surveyed possess digital competences in the first period of post-pandemic education (in September 2022)? And if so, what specific digital skills did they possess? And, what are the sources of teachers' competences acquired over time?

RQ3. Do teachers' competences diagnosed in September 2022 differ from those observed in September 2023? If so, what are the differences and what are the reasons for the *status quo*?

RQ4. How digitally-proficient are the teachers according to the DigCompEdu Framework and what user profile do they represent?

RQ5. What factors can be expected to influence the level of teachers' digital proficiency?

The term "post-COVID" is used here to denote a post-pandemic period with all the consequences and changes that have occurred in the forms of teaching and participants engaged in the learning and teaching process (Bieganowska-Skóra & Pankowska, 2020). The study under discussion was longitudinal in the time frame of September 2022 and September 2023, and consisted of the following steps:

- A retrospective interview aimed at investigating the teachers' state of knowledge and level of digital competences at the outbreak of the pandemic and the early stage of teaching;
- A questionnaire in the form of a check-list aiming at a thorough examination of teachers' digital skills starting from September 2022, which was the first

school year without any COVID-19 restrictions, hence referred to as the post-pandemic school year;

- A questionnaire in the form of a check-list aiming at a thorough examination of teachers’ digital skills after yet another year of classroom learning influenced by the previous school semesters.

All of the above tools guarantee that the requirements for longitudinal studies are met, that is, examining the same individuals to detect any changes that might have occurred over a period of time, and detecting developments or changes in the characteristics of the target population.

### The Participants

The sample in question included four English teachers who had spent almost three semesters at home or school on distance learning. At the time of the interview, in September 2022, they were entering the first school year without any COVID-19 restrictions. The teachers were affiliated with two primary schools, Szkoła Podstawowa nr 2 in Będzin (school A), and Szkoła Podstawowa nr 40 in Sosnowiec (school B). They were all females, aged 25 to 44 years old, having all necessary qualifications to teach English (MA degrees) and a varying teaching experience (from 2 to 20 years). All respondents agreed to participate in the study willingly, three of them emphasizing that they were in the course of their career development and advancement applicable in schools in Poland (see Table 2):

Table 2.  
*The Participants of the Study*

Category	Teacher 1	Teacher 2	Teacher 3	Teacher 4
Gender	Female	Female	Female	Female
Age	25	28	32	44
Education	University of Silesia	Humanitas University in Sosnowiec	WSB Dąbrowa Górnicza, SWE Katowice	University of Silesia, HR University of Humanitas
School	A	A	B	A
Subject	English	English	English	English
Teaching experience	2	3	4	20
Degree of professional advancement	Trainee/beginner	Contract/beginner	Appointed	Diploma
Type of instruction from March to June 2020	asynchronous	asynchronous	asynchronous	asynchronous

Source: author’s own work.

The respondents eagerly answered all the questions from the so-called personal details category enclosed into the opening part of an interview. What is also worth mentioning is the fact that three out of four teachers treated participation in the research as a prestigious experience that would help them on their career path, being part of the teacher development plan.

## The Tools

As mentioned before, the study began with a retrospective interview designed to collect retrospective data on teachers' digital competences at the outbreak of the pandemic interrupting the regular (stationary) learning and imposing restrictions thereon. The form of the interview was semi-structured and two-fold, allowing teachers to reflect on digital competences presented in accordance with the DigCompEdu in its main part, and leaving room for teachers' comments and extra thoughts in between the ready-made sections devoted to digital skills to better understand the participants' reasoning, worded as follows:

- using digital technologies within the scope of professional engagement (organizational communication, professional collaboration, reflective practice and continuous professional development);
- using digital resources (selecting, creating and modifying, managing, protecting and sharing);
- using digital technologies for teaching and learning (teaching and guiding, collaborative learning and self-regulated learning);
- using digital technologies for assessment (assessment strategies, analyzing evidence, feedback and planning);
- using digital technologies for empowering learners (learner accessibility and inclusion, differentiation and personalization, active engagement);
- using digital technologies for facilitating learners' digital competence (information and media literacy, communication, content creation, responsible use and problem-solving strategies).

The second tool was a questionnaire devoted to gathering a detailed characteristic of the teachers' digital competences in the post-pandemic classroom distributed among the subjects on two separate occasions, i.e. September 2022 and September 2023. The first period of measurement was expected to provide an answer to the question of what digital competences teachers possessed after the period of the forced online teaching, while the second was envisaged to determine the level of the teachers' competences in question after another year of stationary work, looking for such changes as increased/decreased competences, an expanded/limited range of tools used, etc. To obtain as much detailed information on teachers' competences

as possible the content of the check-list was consistent with the DigCompEdu Framework, the meaning of which was encapsulated under the statements covering teachers’ activities performed in the language classroom or class-related ones on a daily basis (Table 3):

Table 3.  
*The Questionnaire Form (based on the DigCompEdu Framework)*

	YES	NO	I DON'T KNOW	COMMENTS
1. I make use of digital technologies for communication e.g. with learners, parents, colleagues or support staff.				
2. I communicate responsibly and ethically with digital technologies, e.g. respecting netiquette and acceptable use policies (AUP).				
3. I use digital technologies to collaborate with colleagues in my organisation, e.g. on a dedicated joint project, or to exchange content, knowledge and opinions.				
4. I use digital technologies to share and exchange the resources I use, my knowledge and opinion, with colleagues within and beyond my organisation.				
5. I help peers in developing their digital competence.				
6. I use the internet to update my subject-specific or pedagogical knowledge.				
7. I use the internet to identify suitable training courses and other opportunities for professional development (e.g. conferences).				
8. I use the internet for professional development, e.g. by participating in online courses, webinars, or consulting digital training materials and video tutorials.				
9. I use digital technologies to advise peers on innovative teaching practices, e.g. in professional communities, through personal blogs, or by developing digital training materials for them.				
10. I evaluate the quality of digital resources based on basic criteria, such as e.g. place of publication, authorship, other users’ feedback.				
11. In addition to search engines, I use a variety of other sources, e.g. collaborative platforms, official repositories, etc.				
12. When I use resources in class, I contextualise them for the students, e.g. by pointing out their source and potential bias.				

13. I create and modify complex and interactive digital learning activities, e.g. interactive worksheets, online assessments, online collaborative learning activities (e.g. wikis, blogs), games, apps, visualisations. I co-create learning resources with colleagues.
14. I compile comprehensive digital content repositories and make them available to learners or other educators.
15. I apply licenses to the resources I publish online.
16. I manage the integration of digital content, e.g. videos, interactive activities, into the teaching and learning process.
17. I experiment with and develop new formats and pedagogical methods for instruction.
18. I use a common digital communication channel with my learners to respond to their questions and doubts.
19. When I implement digital learning activities in class, I make sure I am able to (digitally) monitor student behaviour, so that I can offer guidance when needed.
20. I require learners to document their collaborative efforts using digital technologies, e.g. digital presentations, videos, blog posts.
21. I use digital technologies to enable learners to share insights with others and receive peer-feedback, also on individual assignments.
22. I use digital technologies for peer-assessment and as a support for collaborative self-regulation and peer-learning.
23. I use digital technologies for learner self-assessment.
24. I encourage learners to use digital technologies to collect evidence and record progress, e.g. to produce audio or video recordings, photos, texts.
25. I adapt digital assessment tools to support my specific assessment goal, e.g. create a test using a digital test system.
26. I critically reflect on my use of digital technologies for assessment and adapt my strategies accordingly.
27. I continuously monitor digital activity and regularly reflect on digitally recorded learner data to timely identify and react upon critical behaviour and individual problems.

28. I select digital pedagogical strategies that adapt to learners' digital contexts, e.g. limited usage time, type of device available.
  29. I select and use some learning activities, e.g. quizzes or games, that allow learners to proceed at different speeds, select different levels of difficulty and/or repeat activities previously not solved adequately.
  30. When designing learning and assessment activities, I use a range of different digital technologies, which I adapt and adjust to account for different needs, levels, speeds and preferences.
  31. I select, design, employ and orchestrate the use of digital technologies within the learning process according to their potential for fostering learners' active, creative and critical engagement with the subject matter.
  32. I teach learners how to find information, how to assess its reliability, how to compare and combine information from different sources.
  33. I incorporate assignments and learning activities which require learners to effectively and responsibly use digital technologies for communication, collaboration, knowledge co-creation, and civic participation.
  34. I implement learning activities in which learners use digital technologies to produce digital content, e.g. in the form of text, photos, other images, videos, etc.
  35. I enable learners to understand risks and threats in digital environments (e.g. identity theft, fraud, stalking, phishing) and how to react appropriately.
  36. I encourage learners to help each other in developing their digital competence.
  37. I enable learners to apply their digital competence in unconventional ways to new situations and creatively come up with new solutions or products.
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S o u r c e : a u t h o r ' s o w n w o r k .

The teachers' task was to go through the statements included in the form, and tick the appropriate answer (*yes*, *no*, or *I don't know*), which translates into the respondents' common knowledge and practice, lack of competences and non-use of the mentioned tools, and lack of confidence or uncertainty in having/using a digital skill, respectively. Additionally, there was an option to add comments

next to each of the statements if the respondents felt that they met the requirements partially, under certain conditions and/or as a result of something. The contents of the questionnaire reflect all the main areas of teachers' professional digital competence hinted at in the DigCompEdu, involving specific determinants of skills within each category. To start with that of *professional engagement* (statements 1–9), the questionnaire was further divided into *organizational communication* (statements 1–2), *professional collaboration* (statements 3–4), *reflective practice* (statement 5) and *continuous professional development* (statements 6–9). The second area referred to as *digital resources* (statements 10–15) was split into *selecting digital resources* (statements 10–12), *creating and modifying digital resources* (statement 13), as well as *managing, protecting and sharing digital resources* (statements 14 and 15). The next group of competences under the heading *teaching and learning* (statements 16–24) was categorized into *teaching* itself (statements 16–17), *guidance* (statements 18–19), *collaborative learning* (statements 20–22), and *self-regulated learning* (statements 23–24). Accordingly, the *assessment* section (statements 25–27), involved *assessment strategies* (statements 25–26) and *analyzing evidence* (statement 27), while the section that followed, called *empowering learners* (statements 28–31), was divided into *accessibility and inclusion* (statement 28), *differentiation and personalization* (statements 29–30), and *actively engaging students* (statement 31). Last but not least, the area of *facilitating learners' digital competence* was under discussion (statements 32–37), segmented into *information and media literacy* (statement 32), *digital communication and collaboration* (statement 33), *digital content creation* (statement 34), *responsible use* (statement 35), and *digital problem solving* (statements 36–37).

## Presentation and Discussion of Results

### Teacher 1

Teacher 1 is a 25-year-old woman, who was a trainee teacher at the onset of the pandemic in 2020, conducting English classes in grade four (teaching fourth graders exclusively) in an asynchronous way. The whole classroom instruction took on the form of homework assignments sent to the learners *via* a messenger group set up by their parents. They were then asked to email the photos of learners' completed tasks to be graded by the teacher. After several works of that type, the learners received the final semester grades. Apart from the messenger, the teacher did not use any other tools, justifying it by the lack of competence and knowledge about a range of possibilities related to ICT. When asked about the activities

included within the DigCompEdu Framework, she denied her awareness of their existence at that time, which confirmed the teacher's very low or even negligible level of digital competences.

In September 2022, however, the situation was different, demonstrating the teacher's self-awareness in terms of competences, which translated into their actual use in the educational context. The exact scope of the teacher's abilities referring to the original statements taken from the questionnaire is illustrated below (Table 4):

Table 4.  
*The Results of the Study – Teacher 1 and Her Digital Competences (Measurement 1)*

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1. I make use of digital technologies for communication e.g. with learners, parents, colleagues or support staff.
  2. I communicate responsibly and ethically with digital technologies, e.g. respecting netiquette and acceptable use policies (AUP).
  3. I use digital technologies to collaborate with colleagues in my organisation, e.g. on a dedicated joint project, or to exchange content, knowledge and opinions.
  4. I use the internet to update my subject-specific or pedagogical knowledge.
  5. I use the internet to identify suitable training courses and other opportunities for professional development (e.g. conferences).
  6. I use the internet for professional development, e.g. by participating in online courses, webinars, or consulting digital training materials and video tutorials.
  7. I evaluate the quality of digital resources based on basic criteria, such as e.g. place of publication, authorship, other users' feedback.
  8. In addition to search engines, I use a variety of other sources, e.g. collaborative platforms, official repositories, etc.
  9. I create and modify complex and interactive digital learning activities, e.g. interactive worksheets, online assessments, online collaborative learning activities (e.g. wikis, blogs), games, apps, visualisations. I co-create learning resources with colleagues.
  10. I compile comprehensive digital content repositories and make them available to learners or other educators.
  11. I manage the integration of digital content, e.g. videos, interactive activities, into the teaching and learning process.
  12. I encourage learners to use digital technologies to collect evidence and record progress, e.g. to produce audio or video recordings, photos, texts.
  13. I critically reflect on my use of digital technologies for assessment and adapt my strategies accordingly.
  14. I select digital pedagogical strategies that adapt to learners' digital contexts, e.g. limited usage time, type of device available.
  15. I select and use some learning activities, e.g. quizzes or games, that allow learners to proceed at different speeds, select different levels of difficulty and/or repeat activities previously not solved adequately.



16. When designing learning and assessment activities, I use a range of different digital technologies, which I adapt and adjust to account for different needs, levels, speeds and preferences.
  17. I select, design, employ and orchestrate the use of digital technologies within the learning process according to their potential for fostering learners' active, creative and critical engagement with the subject matter.
  18. I implement learning activities in which learners use digital technologies to produce digital content, e.g. in the form of text, photos, other images, videos, etc.
- 

Source: author's own work.

Judging by the data, the teacher was equipped with a variety of digital competences, which she practically implemented at the organizational level while communicating with learners, parents and school staff (statements 1–3), as well as the educational one orchestrating the use of digital technologies for professional self-development *via* a variety of webinars and vlogs (statements 6–8), and teaching *per se* in the shape of selecting digital resources judging carefully the internet websites (statements 10–11, 31), designing learning activities on a game-based learning platforms such as Kahoot (statement 13–14), and managing them in the classroom (statements 16, 24, 34), taking into account learners' constraints, from hardware and software limitations to mental disabilities (statements 28–30), constantly reflecting on the tools used (statement 26). The “operating” skills she possessed at that period can be referred to as the most in-demand ones, catering for the teaching and learning process on the highest possible level, which she had obtained as a result of numerous courses and teacher trainings offered by many institutions.

In September 2023, the repertoire of the teacher's skills expanded to reach the area of sharing skills with others and assessing learners' progress, encapsulated in the statements 4, 5, 23 and 24, respectively. Having improved her resources and techniques through self-study, she felt ready to exchange her ideas with fellow teachers both inside and outside the school, whereas at the classroom level she started using digital technologies to test learners' language skills by playing Blooket, to give an example.

## Teacher 2

Teacher 2 is a 28-year-old woman, who was a contract teacher in March 2020, with commenced procedures for the position of an appointed teacher, which she wanted to fulfill to be promoted in the future. At the time of the outbreak of the pandemic, she was responsible for teaching English mainly to grades five. It was the pandemic that forced her to open a messenger account, and, consequently, use it for contacts with her learners. As she also has a musical education, she initially taught English through links to English songs, to which the learners were asked

to make Polish translations of the lyrics, or to record cover versions. Having recognized the ineffectiveness of such tasks due to the lack of learner response, she continued her asynchronous teaching by sending specific groups of fifth graders a series of activities taken directly from their textbooks and exercise books, and evaluating them on the basis of the feedback she received in the form of photos of the solved tasks sent by parents. Eventually, three months passed this way, resulting in the learner's final grades with which the teacher was not satisfied. Her dissatisfaction was mainly caused by the lack of tools to conduct the teaching and learning process differently. As regards the repertoire of digital skills encompassed in the DigCompEdu Framework, the teacher admitted that she had not been using any of them in the first period of the pandemic education.

The results of the questionnaire administered to the teacher in September 2022 showed little change in this respect. The only digital competences she demonstrated (through ticking in the form) ranged from having digital skills for organizational communication to using the Internet for continuous professional development included in the following statements (Table 5):

Table 5.

*The Results of the Study – Teacher 2 and Her Digital Competences (Measurement 1)*

- 
1. I make use of digital technologies for communication e.g. with learners, parents, colleagues or support staff.
  2. I communicate responsibly and ethically with digital technologies, e.g. respecting netiquette and acceptable use policies (AUP).
  4. I use the internet to update my subject-specific or pedagogical knowledge.
  5. I use the internet to identify suitable training courses and other opportunities for professional development (e.g. conferences).
  6. I use the internet for professional development, e.g. by participating in online courses, webinars, or consulting digital training materials and video tutorials.
- 

Source: author's own work.

To be more specific, the first two entries concerned the teacher's ability to use the Teams application to participate in school conferences and meetings with parents held online until this point. The remaining ones, on the other hand, cannot be explained in any other way than for her individual use in the context of attending professional development courses.

The second meeting with the teacher, in September 2023, produced exactly the same outcomes. Namely, she turned out to possess the same skills related to communication with the school members and authorities, yet she no longer used them due to a complete elimination of online services at school. When it comes to the second area of professional development, the teacher claimed that she had taken fewer online courses in favour of face-to-face meetings.

### Teacher 3

Teacher 3 is a 32-year-old appointed teacher, who taught English to fourth, fifth and sixth graders in an asynchronous manner in the first stage of pandemic education in March 2020. Her main duty at that time was being a form teacher in one of the fourth grades. Her language classes in this group were limited to telephone calls addressed to the parents in which she evaluated her students' individual work previously sent *via* a text message. In the other classes, though, she claimed using *Vulcan* – a school register for communication with parents. This interaction involved writing emails with descriptions of language tasks to be completed by the learners. All the work was then subject to correction and feedback from the teacher, which was the basis for the learners' final grades in all classes. The teacher found the entire period to be exhausting due to the significant number of emails written and written tasks checked, which was a direct result of her lack of familiarity with digital technology. The next stage of education, i.e. the period of returning to schools with no COVID-19 restrictions in September 2022, portrayed the teacher as a person with a wide array of digital competences within the scope of professional elaboration, digital resources, teaching and learning digitally, and empowering learners. The scope of skills used by her is evidenced by the following statements (Table 6).

As seen in the table, the teacher perceived herself as professionally elaborate, i.e. proficient at digital technologies in terms of communication and collaboration both within and beyond the institution of the school, providing an example of her participation in the teaching council and parents' meetings (statements 1–3). She was also very active as far as continuous professional development is concerned, taking part in teacher training programmes and sharing the acquired knowledge with others (statements 6–8). What needs to be emphasized is her ability to assess digital data (statement 10), select appropriate materials by browsing the Internet sources and identify potential threats and risks associated with inappropriate contents (statements 10–11), and create/modify the content (statements 13–14, 16) in line with the learners' needs (statements 28–31). Also, it is worth underlining the fact that she aimed at encouraging learners to work on the linguistic material digitally in the form of collaborative projects such as video recordings or presentations (statement 24) and to share their knowledge outside the classroom by taking part in different school competitions (statement 33).

In the next period of instruction, namely September 2023, the teacher was equipped with additional digital competences which focused on educating learners in terms of threats, and support (statements 35 and 26). The acquisition of her new skills was the result of her attendance at a workshop on Internet law and regulations, and covered both theoretical and practical knowledge regarding the potential dangers of the Internet, which she subsequently conveyed to her learners

(statement 35). Moreover, she admitted spending a lot of time encouraging learners to help one another in developing their digital skills (statement 36).

Table 6.

*The Results of the Study – Teacher 3 and Her Digital Competences (Measurement 1)*

---

1. I make use of digital technologies for communication e.g. with learners, parents, colleagues or support staff.
  2. I communicate responsibly and ethically with digital technologies, e.g. respecting netiquette and acceptable use policies (AUP).
  3. I use digital technologies to collaborate with colleagues in my organisation, e.g. on a dedicated joint project, or to exchange content, knowledge and opinions.
  6. I use the internet to update my subject-specific or pedagogical knowledge.
  7. I use the internet to identify suitable training courses and other opportunities for professional development (e.g. conferences).
  8. I use the internet for professional development, e.g. by participating in online courses, webinars, or consulting digital training materials and video tutorials.
  10. I evaluate the quality of digital resources based on basic criteria, such as e.g. place of publication, authorship, other users' feedback.
  11. In addition to search engines, I use a variety of other sources, e.g. collaborative platforms, official repositories, etc.
  13. I create and modify complex and interactive digital learning activities, e.g. interactive worksheets, online assessments, online collaborative learning activities (e.g. wikis, blogs), games, apps, visualisations. I co-create learning resources with colleagues.
  14. I compile comprehensive digital content repositories and make them available to learners or other educators.
  16. I manage the integration of digital content, e.g. videos, interactive activities, into the teaching and learning process.
  24. I encourage learners to use digital technologies to collect evidence and record progress, e.g. to produce audio or video recordings, photos, texts.
  28. I select digital pedagogical strategies that adapt to learners' digital contexts, e.g. limited usage time, type of device available.
  29. I select and use some learning activities, e.g. quizzes or games, that allow learners to proceed at different speeds, select different levels of difficulty and/or repeat activities previously not solved adequately.
  30. When designing learning and assessment activities, I use a range of different digital technologies, which I adapt and adjust to account for different needs, levels, speeds and preferences.
  31. I select, design, employ and orchestrate the use of digital technologies within the learning process according to their potential for fostering learners' active, creative and critical engagement with the subject matter.
  33. I incorporate assignments and learning activities which require learners to effectively and responsibly use digital technologies for communication, collaboration, knowledge co-creation, and civic participation.
- 

Source: author's own work.

## Teacher 4

Teacher 4 is a 44-year-old woman, who was a diploma teacher at the time of the school closure and lockdown in March 2020. She taught English in the upper grades, that is, seventh and eighth grade learners with the objective of preparing them for the final examination at the end of the school year. Her only medium of communication with her learners at that time was *Vulcan* – an electronic version of the school register, where she posted messages concerning the class material to be covered asynchronously. The learners followed assignments that consisted mostly of the exercises taken from their regular book, and such a form of work was continued until the end of the semester. The teacher regretted having had no other means of communication and/or skills to meet and teach the groups of learners at that time.

In September 2022, when she was asked to complete the questionnaire, the situation was different not only in terms of school-working conditions, but above all the function she performed in the school. She was appointed a vice-deputy of the school in September 2022 and, consequently, she taught English to eighth graders exclusively. As far as her digital competences are concerned, the list of skills she implemented on a regular basis was impressive, and included all the areas of teachers' professional competences suggested by the DigCompEdu Framework (Table 7):

Table 7.

### *The Results of the Study – Teacher 4 and Her Digital Competences (Measurement 1 & 2)*

---

1. I make use of digital technologies for communication e.g. with learners, parents, colleagues or support staff.
2. I communicate responsibly and ethically with digital technologies, e.g. respecting netiquette and acceptable use policies (AUP).
3. I use digital technologies to collaborate with colleagues in my organisation, e.g. on a dedicated joint project, or to exchange content, knowledge and opinions.
4. I use digital technologies to share and exchange the resources I use, my knowledge and opinion, with colleagues within and beyond my organisation.
5. I help peers in developing their digital competence.
6. I use the internet to update my subject-specific or pedagogical knowledge.
7. I use the internet to identify suitable training courses and other opportunities for professional development (e.g. conferences).
8. I use the internet for professional development, e.g. by participating in online courses, webinars, or consulting digital training materials and video tutorials.
9. I use digital technologies to advise peers on innovative teaching practices, e.g. in professional communities, through personal blogs, or by developing digital training materials for them.
10. I evaluate the quality of digital resources based on basic criteria, such as e.g. place of publication, authorship, other users' feedback.

11. In addition to search engines, I use a variety of other sources, e.g. collaborative platforms, official repositories, etc.
12. When I use resources in class, I contextualise them for the students, e.g. by pointing out their source and potential bias.
13. I create and modify complex and interactive digital learning activities, e.g. interactive worksheets, online assessments, online collaborative learning activities (e.g. wikis, blogs), games, apps, visualisations. I co-create learning resources with colleagues.
14. I compile comprehensive digital content repositories and make them available to learners or other educators.
15. I apply licenses to the resources I publish online.
16. I manage the integration of digital content, e.g. videos, interactive activities, into the teaching and learning process.
17. I experiment with and develop new formats and pedagogical methods for instruction.
18. I use a common digital communication channel with my learners to respond to their questions and doubts.
19. When I implement digital learning activities in class, I make sure I am able to (digitally) monitor student behaviour, so that I can offer guidance when needed.
20. I require learners to document their collaborative efforts using digital technologies, e.g. digital presentations, videos, blog posts.
21. I use digital technologies to enable learners to share insights with others and receive peer-feedback, also on individual assignments.
22. I use digital technologies for peer-assessment and as a support for collaborative self-regulation and peer-learning.
23. I use digital technologies for learner self-assessment.
24. I encourage learners to use digital technologies to collect evidence and record progress, e.g. to produce audio or video recordings, photos, texts.
25. I adapt digital assessment tools to support my specific assessment goal, e.g. create a test using a digital test system.
26. I critically reflect on my use of digital technologies for assessment and adapt my strategies accordingly.
27. I continuously monitor digital activity and regularly reflect on digitally recorded learner data to timely identify and react upon critical behaviour and individual problems.
28. I select digital pedagogical strategies that adapt to learners' digital contexts, e.g. limited usage time, type of device available.
29. I select and use some learning activities, e.g. quizzes or games, that allow learners to proceed at different speeds, select different levels of difficulty and/or repeat activities previously not solved adequately.
30. When designing learning and assessment activities, I use a range of different digital technologies, which I adapt and adjust to account for different needs, levels, speeds and preferences.
31. I select, design, employ and orchestrate the use of digital technologies within the learning process according to their potential for fostering learners' active, creative and critical engagement with the subject matter.
32. I teach learners how to find information, how to assess its reliability, how to compare and combine information from different sources.

33. I incorporate assignments and learning activities which require learners to effectively and responsibly use digital technologies for communication, collaboration, knowledge co-creation, and civic participation.
  34. I implement learning activities in which learners use digital technologies to produce digital content, e.g. in the form of text, photos, other images, videos, etc.
  35. I enable learners to understand risks and threats in digital environments (e.g. identity theft, fraud, stalking, phishing) and how to react appropriately.
  36. I encourage learners to help each other in developing their digital competence.
  37. I enable learners to apply their digital competence in unconventional ways to new situations and creatively come up with new solutions or products.
- 

Source: author's own work.

To be more specific, she had digital competences referred to as professional elaboration characterized by using digital skills for communication and collaboration within the school community and beyond it, offering innovative pedagogical practices at the school and inter-school level. In addition to that, it involved all practices aimed at professional self-development and staff development promoting teacher reflection (statements 1–9). Next, when it comes to the area of digital resources, the teacher had all the skills from assessing the quality of the Internet sources to compiling her own digital content repositories to use and share with others (statements 10–15). What followed on the list was her digital competences implemented for the very process of teaching and learning, such as experimenting with methods of instruction, monitoring students digitally, fostering peer-assessment, and encouraging learners to use digital technologies in the classes, indicating that this was the most-frequently employed activity (statements 16–24). As for the assessment-specific issues, she tested students digitally and was constantly self-reflecting on the tools used (statements 25–27). The most eagerly used applications involved Quizlet, Kahoot and Quizizz activities for a more informal evaluation of the learners' language command. The whole section dedicated to learner empowerment showed her awareness in the learner accessibility and inclusion issues, as evidenced by her providing the equipment, adjusting the pace of work and preparing special language materials, often characterized by larger font sizes as required (statements 29–31). Accordingly, the area meant for facilitating learners' digital content made her devote lesson time to teaching learners how to deal with the digital data responsibly and safely, solve any problems encountered, and share this knowledge with others (statements 32–37). In her comments placed next to some of the questions, there were annotations to courses and postgraduate studies she graduated from, including above all Modern Digital Technologies in Education at DSW University of Lower Silesia in Wrocław, Poland. The re-measurement of teacher's digital competences during the second meeting in September 2023 brought about exactly the same results, proving her excellent skills.



## Comparing Teachers' Competences

All the data derived from the four teachers under investigation have allowed for comparing their responses. The table below (Table 8) can be read in three different ways, showing the characteristics common to all the teachers, those that were true for most of them, and those that identified one or two respondents only:

Table 8.

*A compilation of study results – Competences of Teacher 1, 2, 3 & 4*

	T1	T2	T3	T4
1. I make use of digital technologies for communication e.g. with learners, parents, colleagues or support staff.	X	X	X	X
2. I communicate responsibly and ethically with digital technologies, e.g. respecting netiquette and acceptable use policies (AUP).	X	X	X	X
3. I use digital technologies to collaborate with colleagues in my organisation, e.g. on a dedicated joint project, or to exchange content, knowledge and opinions.	X		X	X
4. I use digital technologies to share and exchange the resources I use, my knowledge and opinion, with colleagues within and beyond my organisation.		X		X
5. I help peers in developing their digital competence.		X		X
6. I use the internet to update my subject-specific or pedagogical knowledge.	X	X	X	X
7. I use the internet to identify suitable training courses and other opportunities for professional development (e.g. conferences).	X		X	X
8. I use the internet for professional development, e.g. by participating in online courses, webinars, or consulting digital training materials and video tutorials.	X		X	X
9. I use digital technologies to advise peers on innovative teaching practices, e.g. in professional communities, through personal blogs, or by developing digital training materials for them.				X
10. I evaluate the quality of digital resources based on basic criteria, such as e.g. place of publication, authorship, other users' feedback.	X		X	X
11. In addition to search engines, I use a variety of other sources, e.g. collaborative platforms, official repositories, etc.	X		X	X
12. When I use resources in class, I contextualise them for the students, e.g. by pointing out their source and potential bias.				X
13. I create and modify complex and interactive digital learning activities, e.g. interactive worksheets, online assessments, online collaborative learning activities (e.g. wikis, blogs), games, apps, visualisations. I co-create learning resources with colleagues.	X		X	X
14. I compile comprehensive digital content repositories and make them available to learners or other educators.	X		X	X
15. I apply licenses to the resources I publish online.				X



English Teachers' Digital Competences in a Post-COVID Classroom: A Case Study

16. I manage the integration of digital content, e.g. videos, interactive activities, into the teaching and learning process.	X	X	X
17. I experiment with and develop new formats and pedagogical methods for instruction.			X
18. I use a common digital communication channel with my learners to respond to their questions and doubts.			X
19. When I implement digital learning activities in class, I make sure I am able to (digitally) monitor student behaviour, so that I can offer guidance when needed.			X
20. I require learners to document their collaborative efforts using digital technologies, e.g. digital presentations, videos, blog posts.			X
21. I use digital technologies to enable learners to share insights with others and receive peer-feedback, also on individual assignments.			X
22. I use digital technologies for peer-assessment and as a support for collaborative self-regulation and peer-learning.			X
23. I use digital technologies for learner self-assessment.			X
24. I encourage learners to use digital technologies to collect evidence and record progress, e.g. to produce audio or video recordings, photos, texts.	X	X	X
25. I adapt digital assessment tools to support my specific assessment goal, e.g. create a test using a digital test system.			X
26. I critically reflect on my use of digital technologies for assessment and adapt my strategies accordingly.	X		X
27. I continuously monitor digital activity and regularly reflect on digitally recorded learner data to timely identify and react upon critical behaviour and individual problems.			X
28. I select digital pedagogical strategies that adapt to learners' digital contexts, e.g. limited usage time, type of device available.	X	X	X
29. I select and use some learning activities, e.g. quizzes or games, that allow learners to proceed at different speeds, select different levels of difficulty and/or repeat activities previously not solved adequately.	X	X	X
30. When designing learning and assessment activities, I use a range of different digital technologies, which I adapt and adjust to account for different needs, levels, speeds and preferences.	X	X	X
31. I select, design, employ and orchestrate the use of digital technologies within the learning process according to their potential for fostering learners' active, creative and critical engagement with the subject matter.	X	X	X
32. I teach learners how to find information, how to assess its reliability, how to compare and combine information from different sources.			X
33. I incorporate assignments and learning activities which require learners to effectively and responsibly use digital technologies for communication, collaboration, knowledge co-creation, and civic participation.		X	X

34. I implement learning activities in which learners use digital technologies to produce digital content, e.g. in the form of text, photos, other images, videos, etc.	X	X
35. I enable learners to understand risks and threats in digital environments (e.g. identity theft, fraud, stalking, phishing) and how to react appropriately.		X
36. I encourage learners to help each other in developing their digital competence.		X
37. I enable learners to apply their digital competence in unconventional ways to new situations and creatively come up with new solutions or products.		X

Source: author's own work.

Building on Correos et al., (2014), common to all the teachers are the so-called basic ICT literacy skills (statements 1, 2 and 6) that include general computer knowledge, file management knowledge, system maintenance and security knowledge, word processing skills, communication skills, web skills and presentation skills. The remaining statements ticked fall into the category of ICT utilization in teaching skills (Perez & Murray, 2010; Correos, 2014) denoting the activities that go beyond the computer operation tasks as such. Here, most teachers (Teacher 1, 3 and 4) have this ability to utilize most of digital tools both among their learners and peer teachers for instruction and professional development respectively (statements 3, 7, 8, 10, 11, 13, 14, 16, 24, 28, 30, 31). The skills characterizing the two instructors exclusively pertain to more sophisticated actions, such as producing digital contents with and by their learners themselves, and self-assessment (statements 4, 5, 26, 33, 34). Last but not least, the features placed next to Teacher 4, reflected in every single statement, prove her being the most digitally-advanced, and exceptional in view of being the only one to choose the options promoting digital support among the learners (statements 27, 35, 36, 37). The types of digital competences possessed by the sample correspond to Morańska's (2023) study, where the repertoire of digital skills has been found among the majority of teachers examined and regarded as protective competences intended to ensure that students can function efficiently and safely in the emerging information society.

## Profiling Language Teachers in a Post-COVID Classroom

All things considered, the state and growth of teachers' professional digital competences can be portrayed in at least three different ways. The first one, being *progressive* in nature, is likely to stand for a situation in which teachers acquire competences over time, starting from the zero level (the period between March

and June 2020), going through the measurement 1 or level 1 (September 2022) and measurement 2 or level 2 (September 2023) with increased areas of skills marked by the time interval each time. It is also presumed that teachers' competences will develop in the future. As an instance here, Teacher 1 and Teacher 3 best fit this description, striving for a continuous development of their knowledge and skills. Another observation made, characterized by *progression* and *stability*, concerns the cases of improvement taking into account the first educational stage (March–June 2020) and the post-pandemic period at the onset of September 2022 and, later on, evidence of stability comparing the time-lines of September 2022 and September 2023. Here, a perfect example would be Teacher 2 and Teacher 4, showcasing their improved competences at level 1 (September 2022), and skill stability level at a later time (September 2023). However, due to the scope and quality of competences achieved by the teachers up to the measurement 1, it is suggested to divide this stage of teacher competences into two substages, notably, a *positive* and *negative* one. The positive one is likely to apply to a rich skill repertoire enabling the teacher to conduct language classes with a huge base of knowledge and facilities (Teacher 4), whereas the negative variant is bound to cover basic teachers' digital competences limiting work with the help of new technologies, and more often than not making it impossible (Teacher 2).

Going even further and trying to outline the language teachers' profiles, it seems legitimate to make use of the descriptors of the teachers' digital proficiency levels offered by the DigCompEdu Framework, beginning from A1 (Novice) to C2 (Pioneer) teachers. To build on the framework reference list, a novice is a teacher who has very little contact with digital tools and feels insecure. The explorer uses digital tools, but needs help and inspiration to expand competences. The integrator uses and experiments with digital tools for various purposes, and tries to understand which digital strategies work best. The expert makes use of a range of digital skills confidently, and critically extends the repertoire. The leader has a wide repertoire of flexible, comprehensible and effective digital strategies and is a source of inspiration for others. Last but not least, a pioneer is considered an expert in the field of digital technologies, experiments, introduces innovations, and is a model for other teachers. On the basis of the research findings, Teacher 1 seems to display the features of both the explorer (willing to learn) and the integrator (trying to find the best solutions) with some characteristics of an expert educator (sharing with others). Teacher 2 appears to be a novice with a huge deficit of skills to overcome (if ever realized and approached). Teacher 3, accordingly, resembles all the qualities ascribed to Teacher 1, focused on development and integration of skills, as well as interaction with others. Finally, Teacher 4 gives the impression of being a leader and a pioneer taking care of digital competences both when it comes to the learners and the teachers through efficient development and innovation. Looking at the teachers from a more practical perspective defining digital competences as consisting of IT, information and communication/functional competences (Ogonowska,

2016), the sample in question can be conceived of as representative of *IT* (Information Technology), *literate*s, *I* (Information) *literate*s and *mass-self communication users* respectively. By definition, the first category of competences involves teachers who are hardware, software and application literates (Teacher 1, 3 and 4), leaving Teacher 2 behind due to her lack of skills in using a variety of applications. The second type of competences, reckoned as the teacher's ability to determine when the information is needed, as well as to search, evaluate and use the information from various sources, can be ascribed to all four respondents. Likewise, the third one, interpreted as the skills which encompass features of mass and individual communication, resulting in shaping an image online and communicating effectively with the environment, seems to concern all the teachers under investigation.

## Conclusions

Irrespective of the before-mentioned tendencies, a few facts have to be underlined. First of all, based on the interview data collected, it is evident that the teachers in question did not possess any digital competences in the initial period of the pandemic, which immediately answers the first research question (RQ1). This piece of evidence is also consistent with the research results obtained by others (e.g. Maziarz, 2020; Jabłowska & Wiśniewska, 2021), proving that definitely more teachers knew the applications than used them in their work. Second, dealing with the issues encapsulated in the second research question (RQ2), the competences of the subjects under investigation became visible as a result of the first questionnaire measurement, confirming the assumption that time makes a difference. Here, this difference was the result of the courses taken by the teachers in the lockdown period. Third, with regard to the answers to the remaining research questions (RQ 3, 4, 5), it must be emphasized that the second measurement of the teachers confirmed that their competences differed from the previous period, but to a different extent, probably for individual reasons. Furthermore, the observed tendencies that can be translated into the teachers' digital profiles (from being a novice teacher to a leading one) are independent of teacher seniority and length of teaching experience, yet it is evident that the quality of the teachers' competences is relative to their basic skills and education, as well as the functions performed in the institution, which directly correlates with higher professional skills, including digital competences. Taking into account the increased dynamics of transformation of digital tools and the dynamics of their multiple educational applications during and after the pandemic, it is necessary for teachers to undergo a constant process of developing their digital fluency determined by standardization, affordance and hybridization of ICT (Turula,

2023). Standardization means that teachers use technology seamlessly, that is, blending it into everyday practices, without emotions, and automatically wherever it makes life easier. Affordance stands for a wise matching of technologies (in the sense of specific application(s) to the tasks which teachers set for students. Most often, affordances refer to Puentedura's SAMR model, where S refers to substitution of traditional tools, A means augmentation of didactics using ICT, M stands for modification, while R for redefinition of tasks using technology. Lastly, hybridization denotes here a teacher's ability to implement a flexible learning schedule, be flexible in teaching modes, as well as promote flexibility in collaboration and communication between peers thanks to robust technology skills and infrastructure (Turula, 2023, p. 14).

## **Study limitations**

Although the study allowed for examining teachers' self-perception of digital competences over time, and profiling the teachers in accordance with the digital competence framework, several shortcomings and limitations of the research can be found. First of all, focusing on English teachers' digital competences, the research involved a small sample of four teachers from two primary schools in Poland. Second, the study does not delve into the specific challenges or obstacles which English teachers face in improving their digital competences, which could provide valuable insights for future research and practical implications. Being general in nature, the study does not take into account any specific digital tools, platforms or resources that the English teachers found the most difficult or the most beneficial in improving their digital competences, which could provide practical recommendations for teacher training programmes and curriculum development. Last but not least, the paper does not trace any long-term effects improving the teachers' digital competences on student performance or engagement in the classroom. All of these aspects will be addressed in the future research.

## **Further Studies**

Also, the reasons for teachers' (non)development of digital competences could be a possible direction for the future studies. Moreover, it is worth broadening a perspective of the case study reported on here, and designing research on a larger number of teachers, and on different educational levels, including secondary and

tertiary education. Yet another suggestion is to implement a more practical study, centred on the classroom procedures focused on the actual use of digital competences employed by teachers in the context of language instruction. The latter seems to be extremely timely in the light of the changes announced in the government programme for the development of digital competences, which announces primarily the improvement and development of teachers' methodological skills in the field of digital education, including, among others, improvement and development of teachers' digital skills in the field of artificial intelligence, and digital competences necessary for modern and high-quality management (Monitor Polski, 2023).

## References

- Aznar, V., & González, J. (2010). Interactive resources in secondary education: Design and application. *International Journal of Learning*, 17(2), 181–194.
- Badia, A., Meneses, J., Sergi, F., & Sigalés, C. (2014). Factors affecting school teachers' perceptions of the instructional benefits of educational digital media. *Electronic Journal of Educational Research, Assessment & Evaluation*, 21(2), 1–11. <https://doi.org/10.1016/j.sbspro.2014.05.063>.
- Bieganowska-Skóra, A., Pankowska, D. (2020). Moje samopoczucie w e-szkole. Raport z badań. [My well-being at e-school. The research report]. <https://phavi.umcs.pl/at/attachments/2020/1126/112228-moje-samopoczucie-w-e-szkole-raport-zbadan.pdf>.
- Caena, F., & Redecker, C. (2019). Aligning teacher competence frameworks to 21st century challenges: The case for the European digital competence framework for educators (Digcompedu). *European Journal of Education*, 54(3), 356–369. <https://doi.org/10.1111/ejed.12345>.
- Carmen, C., & Flores, M., A. (2020). COVID-19 and teacher education: a literature review of online teaching and learning practices. *European Journal of Teacher Education*, 43(4), 466–487. <https://doi.org/10.1080/02619768.2020.1821184>.
- Correos, C. (2014). Teachers' ICT Literacy and Utilization in English Language Teaching. *ICT & Innovations in Education International Electronic Journal*, 2(1), 1–25.
- Derakhshan, A., Kruk, M., Mehdizadeh, M., & Pawlak, M. (2022). Activity-induced boredom in online EFL classes. *ELT Journal*, 76(1), 58–68. <https://doi.org/10.1093/elt/ccab072>.
- Dycht, M., & Śmiechowska-Petrovskij, E. (2021). *Edukacja w sytuacji (post)pandemii – wyzwania i perspektywy*. [Education in a (post)-pandemic situation – challenges and perspectives]. Wydawnictwo Adam Marszałek.
- Falloon, G. (2020). From digital literacy to digital competence: The teacher digital competency (TDC) framework. *Educational Technology Research and Development*, 68(5), 2449–2472. <https://doi.org/10.1007/s11423-020-09767-4>.
- Jabłonowska, M., & Wiśniewska, J. (2021). Edukacyjne ramy kompetencji cyfrowych nauczycieli – kluczowe obszary badania poziomu umiejętności i ich implikacje. [The European Framework for the Digital Competence of Educators (DigCompEdu): key skills evaluation areas and their implications]. *Edukacja Ustawiczna Dorosłych*, 1(2021), 49–61. <http://dx.doi.org/10.34866/nb0c-2e79>.
- Jelińska, M., & Paradowski, M. B. (2021). Teachers' engagement in and coping with emergency remote instruction during COVID-19-induced school closures: a multinational contextual perspective. *Online Learning Journal*, 25(1), 303–328. <https://doi.org/10.24059/olj.v25i1.2492>.

- Kessler, G. (2018). Technology and the Future of Language Teaching. *Foreign Language Annals*, 51, 205–218. <https://doi.org/10.1111/flan.12318>.
- Kim, L. E., & Asbury, K. (2020). 'Like a rug had been pulled from under you': The impact of COVID-19 on teachers in England during the first six weeks of the UK lockdown. *British Journal of Educational Psychology*, 90(4), 1062–1083. <https://doi.org/10.1111/bjep.12381>.
- Krumsvik, R. J., Øen Jones, L., Øfstedgaard, M., & Eikeland, O. J. (2016). Upper secondary school teachers' digital competence: Analysed by demographic, personal and professional characteristics. *Nordic Journal of Digital Literacy*, 11(3), 143–164. <https://doi.org/10.18261/issn.1891-943x-2016-03-02>.
- Maziarz, M. (2020). Kompetencje cyfrowe przyszłych nauczycieli języków obcych i ich potencjalny wpływ na planowanie procesu dydaktycznego. [The digital competencies of future foreign language teachers and their potential impact on planning the teaching process]. *Neofilolog*, 55(1), 107–123. <https://doi.org/10.14746/n.2020.55.1.7>.
- Monitor Polski Dziennik Urzędowy Rzeczypospolitej Polskiej. Uchwała nr 24 Rady Ministrów z dnia 21 lutego 2023r. <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WMP20230000318>.
- Morańska, D. (2023). Kompetencje cyfrowe nauczycieli. Raport z badań. [The digital competencies of teachers. Research report]. *Dydaktyka Informatyki*, 18, 92–104. <https://doi.org/10.15584/di.2023.18.7>.
- Ogonowska, A. (2016). Kompetencje cyfrowe we współczesnej cywilizacji medialnej. [Digital Competences in the Modern Media Civilization]. *Cyfrowa humanistyka*, 8(2), 14–26.
- Olofsson, A. D., Fransson, G., & Lindberg, J. O. (2019). A study of the use of digital technology and its conditions with a view to understanding what 'adequate digital competence' may mean in a national policy initiative. *Educational Studies*, 46(6), 1–17. <https://doi:10.1080/03055698.2019.1651694>.
- Ouma, G. O., Awuor, F. M., & Kyambo, B. (2013). E-Learning readiness in public secondary schools in Kenya. *European Journal of Open, Distance and E-Learning*, 16(2), 97–110. <https://files.eric.ed.gov/fulltext/EJ1017522.pdf>.
- Papaja, K. (2021). Negative emotions experienced by Polish English teachers during COVID 19: a qualitative study based on diaries. *Lublin Studies in Modern Languages and Literature*, 45(3), 3–17. <https://doi.org/10.17951/ismll.2021.45.1.3-17>.
- Pawlak, M., Derakhshan, A., Mehdizadeh, M., & Kruk, M. (2022). Boredom in online English language classes: Mediating variables and coping strategies. *Language Teaching Research*, 101, 41–82. <https://doi.org/10.1177/13621688211064944>.
- Pérez, J., Murray, M. C. (2010). Generativity: The New Frontier for Information and Communication Technology Literacy. *Interdisciplinary Journal of Information, Knowledge, and Management*, 5, 127–137.
- Plebańska, M., Szyller, A., Sieńczewska, M. (2020). *Edukacja zdalna w czasach COVID-19. Raport z badania – czerwiec 2020*. [Distance Education in the Times of COVID19. Research report – June 2020]. University of Warsaw.
- Pyżalski, J., Zdrodowska, A., Tomczyk, Ł., Abramczuk, K. (2019). *Polskie badanie EU Kids Online 2018. Najważniejsze wyniki i wnioski*. Wydawnictwo Naukowe UAM.
- Selwyn, N. (2011). *Schools and schooling in the digital age: A critical analysis*. Routledge.
- Tomczyk, Ł. (2019). What do teachers know about digital safety? *Computers in the Schools*, 36(3), 167–187. <https://doi.org/10.1080/07380569.2019.1642728>.
- Tomczyk, Ł. (2021). E-learning in Poland: Challenges, opportunities and prospects for remote learning during the Covid-19 pandemic. *Higher Education in Russia and Beyond*, 2(27), 10–12.
- Turula, A. (2023). Postęp technologiczny a przyszłość edukacji. [Technological progress and the future of education]. *Refleksje*, 4, 12–16.



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## **Kompetencje cyfrowe nauczycieli języka angielskiego w klasie post-covidowej – studium przypadku**

### **S t r e s z c z e n i e**

Artykuł porusza kwestię kompetencji cyfrowych nauczycieli języka angielskiego w kontekście klasy post-covidowej objętej ramami czasowymi począwszy od września 2022 do września 2023 roku. W celu sprawdzenia poziomu kompetencji cyfrowych nauczycieli, którzy według obecnego stanu badań, w pierwszym okresie pandemii wykazywali brak ww. przeprowadzony został wywiad retrospektywny. Na etapie drugim, we wrześniu 2022 roku, kiedy rozpoczął się pierwszy rok szkolny bez jakichkolwiek restrykcji pandemicznych, nauczyciele zostali poddani szczegółowemu oglądowi kompetencji za pomocą ankiety pozwalającej na samodzielne oznaczenie (nie)wykorzystywanych kompetencji cyfrowych podczas zajęć językowych zaczerpniętych z europejskiej ramy kompetencji cyfrowych nauczycieli (DigCompEdu). Dodatkowo, stan wiedzy i umiejętności nauczycieli z tego okresu, został porównany z ich kompetencjami w okresie drugim, we wrześniu 2023 roku, by sprawdzić wpływ takich czynników, jak czas, wcześniejsze doświadczenie w używaniu kompetencji oraz przebyte szkolenia i kursy na funkcjonowanie nauczycieli w klasie w okresie późniejszym. Do badania przystąpiło 4 nauczycieli reprezentujących szkoły podstawowe (SP nr 2 w Będzinie – trzech nauczycieli i SP nr 40 w Sosnowcu – 1 nauczyciel). Okazało się, że znajomość nowoczesnych technologii wśród próby była znikoma w pierwszy okresie lockdownu, co potwierdziło wstępne założenie, a później nabyte kompetencje cyfrowe były kwestią czasu i efektem udziału w szkoleniach i kursach. Jako że badani reprezentowali różny poziom umiejętności, który różnie rozkładał się w czasie, zarysowane zostały trzy tendencje (nie)rozwoju ww. kompetencji u poszczególnych respondentów. Ponadto nakreślono profile osób biorących udział w badaniu w oparciu o zestawienie determinantów biegłości cyfrowej nauczycieli zaproponowanej przez europejskie ramy kompetencji cyfrowych nauczycieli. Podkreślono fakt, iż nie tyle wiek, staż pracy, czy stopień awansu zawodowego mają wpływ na jakość kompetencji nauczycieli, ile ich wiedza bazowa, wykształcenie oraz dodatkowa funkcja w szkole, z którą mogą wiązać się dodatkowe kompetencje z zakresu nowoczesnych technologii. Zaleca się poszerzenie badań, w celu zmierzenia kompetencji na większej próbie badawczej, a także przyjrzenia się sytuacji klasy szkolnej pod kątem (nie)wykorzystywanych konkretnych kompetencji cyfrowych przez nauczycieli.

**S ł o w a k l u c z o w e:** kompetencje cyfrowe, nauczyciel języka angielskiego, europejskie ramy kompetencji cyfrowych (DigCompEdu), klasa post-covidowa

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## **Competencias digitales de profesores de inglés en el aula post-covid: un estudio de caso**

### **R e s u m e n**

El artículo aborda la cuestión de las competencias digitales de los profesores de inglés en el contexto del aula post-Covid abarcado por el periodo de septiembre de 2022 a septiembre de 2023. Con el fin de comprobar el nivel de competencias digitales de los docentes que, según el estado ac-



tual de la investigación, presentaban una falta de las habilidades mencionadas en el primer período de la pandemia, se realizó una entrevista retrospectiva. En la segunda etapa, en septiembre de 2022, cuando comenzó el primer año escolar sin restricciones pandémicas, los docentes fueron sometidos a una revisión detallada de las competencias mediante una encuesta que les permitió autocalificar las competencias digitales (no) utilizadas durante las clases de idiomas tomadas del Marco Europeo de Competencias Digitales del Profesorado (DigCompEdu). Además, se comparó el estado de conocimientos y habilidades de los docentes de este período con sus competencias en el segundo período, en septiembre de 2023, para comprobar el impacto de factores como el tiempo, la experiencia previa en el uso de competencias y la formación y los cursos realizados en el desempeño de los docentes funcionando en el aula más tarde. En el estudio participaron cuatro profesores de escuelas primarias (escuela primaria n° 2 de Będzin, tres profesores y escuela primaria n° 40 de Sosnowiec, 1 profesor). Resultó que el conocimiento de las tecnologías modernas entre la muestra era insignificante en el primer período del confinamiento, lo que confirmó la suposición inicial, y posteriormente las competencias digitales adquiridas fueron una cuestión de tiempo y el resultado de la participación en formaciones y cursos. Como los encuestados representaban diferentes niveles de habilidades, que se distribuyeron de manera diferente a lo largo del tiempo, se describieron tres tendencias en el (no)desarrollo de las habilidades mencionadas anteriormente. competencias de los encuestados individuales. Además, se delinearon los perfiles de las personas que participaron en el estudio a partir de la lista de determinantes de la competencia digital de los docentes propuesta por el Marco Europeo de Competencia Digital de los Docentes. Se destacó que no es la edad, la antigüedad o el grado de promoción profesional lo que influye en la calidad de las competencias de los docentes, sino más bien sus conocimientos básicos, su educación y una función adicional en la escuela, que puede implicar competencias adicionales en el campo de las tecnologías modernas. Se recomienda ampliar la investigación para medir las competencias en una muestra de investigación más amplia, así como observar la situación de la clase escolar en términos de competencias digitales específicas (no) utilizadas por los docentes.

**Palabras clave:** competencias digitales, profesor de inglés, Marco Europeo de Competencias Digitales (DigCompEdu), aula post-covid

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## **Цифровые компетенции учителей английского языка в постковидном классе – практический пример**

### **Аннотация**

В статье рассматривается вопрос цифровых компетенций учителей английского языка в контексте постковидного обучения, охватываемого временным интервалом с сентября 2022 по сентябрь 2023 года. С целью проверки уровня цифровых компетенций учителей, которые, по данным текущего состояния исследований, в первый период пандемии показали отсутствие вышеперечисленных навыков, было проведено ретроспективное интервью. На втором этапе, в сентябре 2022 года, когда первый учебный год начался без ограничений, связанных с пандемией, учителя прошли детальную проверку компетенций с помощью опроса, позволяющего им самостоятельно отмечать (не)используемые цифровые компетенции на уроках языка, взятые из Европейской системы цифровой компетентности учителей (DigCompEdu). Кроме того, состояние знаний и навыков учителей за этот период сравнивалось с их компетенциями во втором периоде, в сентябре 2023 года, чтобы проверить влияние таких факторов,

как время, предыдущий опыт использования компетенций, а также пройденное обучение и курсы на учителях. функционирование в классе позже. В исследовании приняли участие четыре учителя, представляющие начальные школы (Начальная школа № 2 в Бендзине – три учителя и Начальная школа № 40 в Сосновце – 1 учитель). Оказалось, что знание современных технологий среди выборки было незначительным в первый период локдауна, что подтвердило первоначальное предположение, а в дальнейшем приобретенные цифровые компетенции были вопросом времени и результатом участия в тренингах и курсах. Поскольку респонденты представляли разные уровни навыков, которые по-разному распределялись во времени, были намечены три тенденции в (не)развитии вышеупомянутых навыков. компетенции отдельных респондентов. Кроме того, профили людей, участвовавших в исследовании, были составлены на основе списка факторов, определяющих цифровую компетентность учителей, предложенных Европейской рамкой цифровой компетентности учителей. Подчеркнуто, что на качество компетенций учителей влияют не возраст, стаж или степень профессионального роста, а их базовые знания, образование и дополнительная функция в школе, которая может предполагать дополнительные компетенции в области современных технологий. Рекомендуется расширить исследование для измерения компетенций на более крупной исследовательской выборке, а также посмотреть на ситуацию школьного класса с точки зрения конкретных цифровых компетенций, (не) используемых учителями.

**К л ю ч е в ы е с л о в а:** цифровые компетенции, учитель английского языка, Европейская система цифровых компетенций (DigCompEdu), постковидный класс