DiSIGMA PUBLICATIONS

Journal of Language and Culture in Education
ISSN: 2945-2864
Special Issue, Volume 2, Pages 130-143, January - February 2025
DOI: 10.5281/zenodo.14725389
https://lce.disigma.gr/index.php/lce

Available online at **https://lce.disigma.gr/index.php/lce**

Digital Competences – as a 21st Century Meta-Competence

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Abstract

The issue of competences, including digital competences, is highly significant today as it relates to individual functioning. Research focused on identifying the determinants of competences and analyzing the effects of these influences is justified, necessary, and pedagogically and socially warranted. Digital (IT) competences intersect with informational, communicative, creative, and moral competences and are essential for everyone in today's world. Increasingly, the creators of educational and upbringing processes (parents, teachers) who assist their charges in learning about the world and other people are consciously and responsibly utilizing new technologies, teaching media literacy, and guiding the use of information sources. It is worth noting that contemporary interdisciplinary discourse[1] points to the implications of emerging research and descriptive perspectives, forming a basis for developing recommendations.

Keywords: Key competences, digital competences, education

1 W. Król-Gierat, V. Savić, *The diverse linguistic attainment and attitude development of children learning English as a foreign language in inclusive classes*, "Studia Pedagogiczne, Problemy Społeczne, Edukacyjne i Artystyczne", t. 42, 2023, p. 261.

Key Competences – A Conceptual Analysis

In social perception, the word "competence" has a positive connotation. Possessing "competence" commonly implies having a distinguished range of abilities. This concept aligns with the dictionary definition, where competence is defined as "the scope of one's knowledge, skills, and experience"[1]. It can therefore be stated that possessed competences determine people's functioning as a society, as they are essential for fulfilling specific social roles.

S. Konarski[2] provides a broader definition of competence, emphasizing that it "includes a set of various human predispositions on which efficient task performance, autonomous self-development, and the fulfillment of social and organizational roles depend. Competence is a latent trait (meta-quality) that manifests in specific behaviors"[3]. Research on this topic is conducted across multiple fields of science (see Plecka et al., 2013; Małgorzewicz, 2014; Sijko, 2014; Piróg, 2015; Almerich et al., 2016; Derwik et al., 2016; Lambrechts & Van Petegem, 2016; Pankowska, 2017). For example, economic sciences focus on examining professional, communicative, and organizational competences, among others[4]. In economic terms, a competent individual is someone who performs their work correctly, possesses relevant knowledge and skills, and applies them appropriately in various situations[5].

In the literature, there are also attempts to define the concept under consideration, particularly in linguistics and cultural anthropology. This approach highlights three aspects that determine the meaning of competence: ability, knowledge, and quality. Ability here refers to readiness to undertake certain tasks, intellectual capacity, the capability to fulfill significant social roles, and the skill to use something. Knowledge is based on awareness and information. The final aspect, quality, pertains to being appropriate or adequate[6].

Competences as a research topic are most extensively explored by social science researchers. The definition of the term in psychology aligns closely with the previously presented definitions. In the *Dictionary of Psychology*, competence is defined as "the ability to perform a task or accomplish something"[7]. Thus, competence is similarly equated with the ability to carry out specific actions. For many years, the term has also been considered in pedagogy[8]. W. Okoń[9] emphasized that "in pedagogy, competence is understood as the ability for personal self-realization, a fundamental condition for education, and also as the capacity for specific task areas, as an outcome of the learning process." The pedagogical perspective connects the possession of appropriate competences with education. Competences themselves are acquired through the learning process, resulting in the ability to perform certain tasks.

1 S. Dubisz, (red.), *Uniwersalny Słownik Języka Polskiego*. Wydawnictwo PWN 2006, p. 186.

2 S. Konarski, *Kluczowe znaczenie kompetencji społeczno-psychologicznych we współczesnych koncepcjach i praktyce systemów edukacji ekonomistów i menedżerów*. W: S. Konarski (red.), Kompetencje społeczno-psychologiczne ekonomistów i menedżerów. Teoria. Badania. Edukacja (pp. 7-21). Szkoła Główna Handlowa w Warszawie.

3 Ibid., pp. 8-9.

4 G. Urbanek, *Kompetencje a wartość przedsiębiorstwa: Zasoby niematerialne w nowej gospodarce*. Wolters Kluwer 2011.

5 A. Rogozińska-Pawełczyk, *Kompetencje w organizacji.* Acta Universitatis Lodziensis. Folia Oeconomica. 199, 2006, pp. 99–120.

6 B. Guzik, *Powinnościowy model języka w dyskursie edukacyjnym*. Wydawnictwo Naukowe Akademii Pedagogicznej 2003.

7 A. Reber, *Słownik psychologii*. Wydawnictwo Naukowe Scholar 2000, p. 304.

8 por. J. Rutkowiak, *Metodologiczna sytuacja pedagogiki a modele kształcenia nauczycieli, „Ruch Pedagogiczny" 1986; M. Czerepaniak-Walczak, Aspekty i źródła profesjonalnej refleksji nauczyciela*, Wydawnictwo Edytor 1997.

9 W. Okoń, *Słownik pedagogiczny*, Wyd. PWN, Warszawa 1992, p. 176.

The concept of competence has also been employed by international bodies. Using the term "key competences," a catalog of factors responsible for self-realization, personal development, active citizenship, and social integration among European citizens has been defined[10]. Key competences include, among others, the ability to use tools for effective interaction with the environment, understanding and adapting these tools to personal goals, engaging in the lives of others and collaborating in diverse groups, and taking responsibility for managing one's own life[11]. It has been noted that globalization processes and the shift to a knowledge-based economic model require citizens to reprioritize their resource sets[12]. In light of new regulations, every European should have access to optimal conditions for developing key competences and lifelong learning, which also implies changes in education (see Tiana et al., 2011). According to the Council of the European Union Recommendation of 22 May 2018 on Key Competences for Lifelong Learning (Annex to Council Recommendation 2018/C 189/01), the new list of key competences[13] includes:

1. Literacy competence;
2. Multilingual competence;
3. Mathematical competence and competence in science, technology, and engineering;
4. Digital competence;
5. Personal, social, and learning to learn competence;
6. Civic competence;
7. Entrepreneurship competence;
8. Cultural awareness and expression competence

(Annex to the Council of the European Union Recommendation 2018/C 189/01)[14].

To acquire specific key competences, individuals must assimilate the knowledge, skills, and attitudes that demonstrate these competences[15]. Acquiring and mastering key competences facilitates various forms of learning throughout different life stages, extending into senior years. Particular attention should be paid to the interrelationships among all the listed key competences, which are grounded in critical thinking, problem-solving skills, the ability to assess risks, and decision-making[16]. These areas complement and reinforce one another, illustrating that selected key competences are cohesive and should be developed simultaneously rather than individually.

10 G. Halász, G., A. Michel, A., Key, *Competences in Europe: interpretation, policy formulation and implementation*. European Journal of Education, 2011, 46(3), pp. 289–306.

11 J. Gordon, J., G. Halász, G., M. Krawczyk, T. Leney, A. Michel, D. Pepper, J. Wiśniewski, *Key competences in Europe: Opening doors for lifelong learners across the school curriculum and teacher education*. CASE Network Reports, 2009, p. 87.

12 J. Strzelczyk-Łucka, *Człowiek w obliczu zmian na rynku pracy*, W: J. Górna & M. Makowski (red.), LifeLong Learning – edukacja przez całe życie. Akademia im. Jana Długosza w Częstochowie 2010.

13 The baseline version of the recommendations was published as early as 2006.

14 Detailed definitions of the presented competences are provided in Table 1.

15 cf. M. Buheji & A. Buheji, *Planning competency in the new Normal-employability competency in post-COVID-19 pandemic*, "International Journal of Human Resource Studies" 10(2), 2020, pp. 237-251.

16 J. Uszyńska-Jarmoc & M. Bilewicz (red.), *Kompetencje kluczowe dzieci i młodzieży. Teoria i badania*. Wydawnictwo Akademickie Żak 2015.

Viewing key competences in the context of their development potential, the natural setting for this process is the school, with teachers[17] as its primary facilitators. Both Polish and international researchers emphasize the need for studies on the quality of key competence development within institutional education (Cieślar & Samsel-Opalla, 2010; Pepper, 2011; Gadomska et al., 2012; Poteralski, 2017; Skweres-Kuchta, 2017; Górowska-Fells et al., 2018; Torończak, 2018). Data from 2012 indicate that, in most European countries, the concept of key competences has been integrated into curricula and school practice through primary national strategic documents[18]. Common initiatives include curriculum reforms, teacher training and professional development, and support forms for students with special needs. The current Ordinance of the Minister of National Education of January 30, 2018, regarding the core curriculum for general secondary schools, technical schools, and second-level vocational schools, also explicitly underscores the importance of developing key competences at this educational stage. However, the limitations of the Polish educational system effectively hinder this process[19]. Developing the components recommended in the Council's Recommendation that constitute key competences requires schools to move beyond a replicative model, as it fails to create problem-solving situations that allow for independent decision-making and provide opportunities to enhance skills and attitudes[20].

Research reports from recent years on the development of key competences among Polish students indicate:

a. A schematic and rote-learning approach in the area of mathematical competences (Kalinowska, 2010, 2019; Dudel, 2015; Nowak-Łojewska, 2020);

b. Dominant use of lecture-based methods and a passive-receptive attitude among students, which contradicts the development of independence in the learning process (Głoskowska-Sałdatow, 2015);

c. Neglect of the role of artistic subjects in general education, which is associated with limited development of competences in cultural awareness and expression (Suświłło, 2015).

Key competences form a complex theoretical-practical system that should be consolidated into specific skills and responsible attitudes[21]. The latter component is, in fact, the most crucial element of the research project. Unfortunately, it is also the component treated most superficially. This is evidenced, for example, by H. Solarczyk-Szwec et al.'s (2006) analysis of core curricula related to social and civic competences. The researchers observed that most requirements fall within the domain of knowledge (75%) and skills (31%), while only 10.3% of educational requirements in core curricula focus on shaping attitudes[22]. Attitudes, understood by the Council of the European Union as readiness and willingness to act and thus constituting a vital practical component, are regrettably considered the least significant element in the curriculum.

17 L. Piotrowska, *Od kompetencji kluczowych do kluczowych procedur.* Centrum Edukacji Obywatelskiej 2019.

18 Eurydice, *Rozwijanie kompetencji kluczowych w szkołach w Europie: wyzwania i szanse dla polityki edukacyjne*j. Fundacja Rozwoju Systemu Edukacji 2012.

19 B. Śliwerski, *Dokąd zmierza polska edukacja?* "Neodidagmata", 33/34, pp. 65-76.

20 A., Okońska-Walkowicz, M. Plebańska & H. Szaleniec, *O kompetencjach kluczowych, e-learningu i metodzie projektów*, Wydawnictwo Szkolne i Pedagogiczne 2009.

21 E. Torończak, *Znaczenie kompetencji kluczowych dla budowania partnerstwa w Europie*, "Kwartalnik Edukacyjny", 1(64), 2011, pp. 3-17.

22 H. Solarczyk-Szwec, V. Kopińska, A. Matusiak, Kompetencje społeczne na wejściu w dorosłość. Krytyczna analiza podstawy programowej kształcenia ogólnego dla IV etapu edukacyjnego. Edukacja Dorosłych 2016, 2, pp. 29–44.

In psychology, the term "attitude" is defined as a "positive or negative stance towards a certain object, concept, or situation, as well as a readiness to respond in a predetermined way to these (or related) objects. Both the stance and readiness to respond have emotional, motivational, and intellectual aspects"[23]. The process of attitude formation is heavily influenced by peers, family, and school[24]. A fully developed attitude encompasses three components: a cognitive element (e.g., information about the attitude object, beliefs), an emotional element (higher feelings, such as social ones, or motives like aspirations and desires), and a behavioral element (specific behaviors, verbal or non-verbal responses[25]). All these elements have been incorporated into the description of attitudes characterizing key competences presented in the table 1.

Table 1. *Definitions of Key Competences and Their Descriptions in Terms of Attitudes*

Competence Name	Definition	Description of Competence in Terms of Attitudes
Competence in Literacy	The ability to identify, understand, express, create, and interpret concepts, feelings, facts, and opinions in spoken and written form, using images, sounds, and digital materials in all fields and contexts. It includes the ability to communicate effectively and interact appropriately and creatively with others.	A positive attitude towards literacy involves a willingness to engage in critical and constructive dialogue, sensitivity to aesthetic values, and interest in interacting with others. This is associated with an awareness of language's impact on others and the need to understand and use language in a socially positive and responsible way.
Competence in Multilingualism	This competence encompasses the ability to use various languages effectively for communication. In terms of skill scope, it essentially overlaps with literacy competence. Language competence includes a historical dimension and intercultural skills. It is based on the ability, as outlined in the European language framework, to mediate between different languages and media. It may also involve maintaining and further developing competence in the native language, as well as mastering the official language(s) of the country if needed.	A positive attitude includes an appreciation of cultural diversity, an interest in various languages and intercultural communication, and curiosity about them. It also includes respect for each person's individual language profile, including respect for the native language of individuals from minority or migrant backgrounds, and appreciation of a country's official languages as common frameworks for interaction.

23 E. R. Hilgard, *Wprowadzenie do* psychologii, Wydawnictwa Szkolne i Pedagogiczne 1967, p. 834.

24 A. Wróbel, *Wartości i postawy młodzieży dostosowanej i niedostosowanej społecznie wobec zachowań przestępczych*, "Innowacje Psychologiczne", 2, 2013, pp. 35-47.

25 E. Aronson, T. D. Wilson & R. M. Akert, *Psychologia społeczna: serce i umysł*, Wydawnictwo Zysk i S-ka 1997.

Competence Name	Definition	Description of Competence in Terms of Attitudes
Mathematical Competence and Competence in Science, Technology, and Engineering	A. Mathematical competence is the ability to develop and use mathematical thinking and perception to solve problems in everyday situations. Both process and activity, as well as knowledge, are important, with mastery of mathematical reasoning forming the basis. Mathematical competence includes, to varying degrees, the ability and willingness to use mathematical modes of thought and representation (such as formulas, models, constructs, graphs, and tables). B. Competence in science involves the ability and willingness to explain the natural world using existing knowledge and methods, including observation and experimentation, to formulate questions and draw evidence-based conclusions. Technical and engineering competence applies this knowledge and methods to meet perceived human needs or requirements. Competence in science, technology, and engineering includes understanding human-induced changes and recognizing one's responsibility as a citizen.	A positive attitude in mathematics is based on respect for truth and a desire to seek arguments and assess their validity. This competence includes attitudes of critical understanding and curiosity, respect for ethical issues, and support for both safety and environmental sustainability, particularly in relation to scientific and technological progress within an individual's personal, family, community, and global context.
Digital Competence	Digital competence includes the confident, critical, and responsible use of digital technologies and interest in them for learning, work, and participation in society. It includes the ability to use information and data, communicate and collaborate, use media, create digital content (including programming), and address safety (including digital comfort and cybersecurity), intellectual property issues, problem-solving, and critical thinking.	Using digital technology and content requires a reflective and critical, yet curious, open, and forward-looking attitude toward its development. It also requires an ethical, safe, and responsible approach to using these tools.
Personal, Social, and Learning to Learn Competence	This competence is the ability to self-reflect, manage time and information effectively, work constructively with others, show resilience, and manage one's learning and career. It includes the ability to cope with uncertainty and complexity, the ability to learn, support one's physical and emotional well-being, maintain physical and mental health, and the ability to lead a health-conscious, future-oriented lifestyle, feel empathy, and manage conflicts in an inclusive and supportive context.	This competence is based on a positive attitude toward one's personal, social, and physical well-being and lifelong learning. It is grounded in collaboration, assertiveness, and integrity. It includes respect for the diversity of others and their needs, as well as a willingness to overcome biases and reach compromises. The ability to set and define goals, motivate oneself, and develop resilience and confidence to achieve success in lifelong learning is essential. A problem-solving mindset supports both the learning process and the ability to overcome obstacles and adapt to change. This includes a desire to use past learning and life experiences and a curiosity to seek learning and development opportunities in various life situations.

Competence Name	Definition	Description of Competence in Terms of Attitudes
Civic Competence	Civic competence is the ability to act as a responsible citizen and fully participate in civic and social life, based on an understanding of social, economic, legal, and political concepts and structures, as well as global events and sustainable development.	The foundation of a responsible and constructive attitude is respect for human rights as the basis of democracy. Constructive participation includes a willingness to participate in the democratic decision-making process at all levels and in civic activities. It includes supporting social and cultural diversity, gender equality, social cohesion, a sustainable lifestyle, promoting a culture of peace and non-violence, respecting the privacy of others, and accepting responsibility for the environment. Interest in political, social, and economic events, humanities, and intercultural communication is necessary to prepare for overcoming biases and reaching compromises where needed, as well as ensuring social justice and fairness.
Entrepreneurship Competence	Entrepreneurship competence includes the ability to recognize opportunities and ideas and transform them into value for others. Entrepreneurship is based on creativity, critical thinking and problem-solving, initiative, perseverance, and the ability to work collaboratively to plan and manage projects of cultural, social, or financial value.	An entrepreneurial attitude is characterized by initiative, a sense of agency, proactivity, a forward-looking perspective, courage, and perseverance in pursuing goals. It includes a desire to motivate others and appreciate their ideas, empathy, and care for others and the world, as well as taking responsibility and an ethical stance throughout the process.
Cultural Awareness and Expression Competence	This competence includes understanding ways to creatively express and communicate ideas and meanings in different cultures, using various forms of art and other cultural expressions, and respect for this process. It involves engaging in understanding, developing, and expressing one's ideas and experiencing one's place or role in society in many different ways and contexts.	Key here is an openness to and respect for diverse forms of cultural expression, along with an ethical and responsible approach to intellectual and cultural property. A positive attitude also includes curiosity about the world, openness to imagining new possibilities, and a willingness to participate in cultural experiences.

Source: Author's adaptation based on the Council of the European Union Recommendation of 22 May 2018 on Key Competences for Lifelong Learning.

The Importance of Digital Competences in the 21st Century

The modern world, characterized by pervasive digitalization and constant change, requires humans—now referred to as *homo mediens*[26] —to adapt to an ever-transforming reality. "The ongoing technological expansion drives the trend of digitalizing reality, a process that can no longer be halted. It also revolutionizes human life […]. The networked and media-based reality, existing as a component of the real world, offers

26 J. Miąso, *Kompetencje medialne jako strategiczne i kluczowe kompetencje każdego człowieka w społeczeństwie informacyjnym, medialnym, sieciowym*; https://pracownik.kul.pl/files/83913/public/dem/miaso.pdf [accessed July 25, 2024].

numerous opportunities […]"[27], but to fully utilize these opportunities, specific skills are essential. Among them are those related to the broad use of digital technology, which enables individuals to better handle various challenges across multiple areas of life. Leveraging the potential of today's digital technologies requires a combination of knowledge, skills, and attitudes in this field.

The rapid technological advancement, widespread internet access, and the "shift of many forms of social life to the digital space"[28] now demand the ongoing development of digital competences across all age groups, from preschool children to senior citizens, who are particularly at risk of digital exclusion. Thus, in an era marked by digitalization, digital competences are crucial for full participation in society and access to digital resources. Ensuring their development is essential, as a sufficient level of digital competence enables individuals to fulfill their personal needs and ensures well-being. It is clear that digital education should be provided both within and outside the formal education system, as individuals aware of today's digital reality will seek opportunities to acquire these skills for personal, social, civic, and economic purposes.

What Are Digital Competences? In numerous academic studies and documents dedicated to this topic, a variety of definitions of digital competences can be found, making it challenging to list or clearly categorize them all. Undoubtedly, digital competences represent a broad concept whose significance has been highlighted by the Council of the European Union, which defined them as essential for self-realization, personal development, and active global citizenship. Digital competences are listed as one of the eight key competences, alongside fundamental skills such as reading, writing, mathematical, and linguistic abilities. According to the Council of the European Union, digital competences are "the confident, critical, and responsible use of digital technologies and interest in them for learning, work, and societal participation"[29]. Another definition can be found on the website of the Ministry of Digital Affairs, which states that digital competences are a "harmonious composition of knowledge, skills, and attitudes enabling life, learning, and work in a society utilizing digital technologies"[30]. Meanwhile, *the Information Society in Numbers* report describes digital competences as a set of information and IT competences[31]. According to *the Framework Catalog of Digital Competence*s (Table 2), they should be functional, meaning "their acquisition is not an end in itself but serves to meet various needs and gain benefits in different areas of life" Furthermore, it states that "functional competences are based on IT and informational competences, which provide the foundation for performing specific actions and obtaining benefits through the use of digital technologies"[32]. Digital competences thus encompass a wide range of skills related to using a broad spectrum of technologies in many aspects of life. Possessing them is a necessity in today's

27 A. Winiarczyk, T. Warzocha, *TIK w edukacji. Przygotowanie akademickie przyszłych nauczycieli w zakresie wykorzystania nowych technologii w eduk*@cji, Rzeszów 2022, p. 9.

28 A. Stawicka, *Wykluczenie cyfrowe w Polsce*, W: Kancelaria Senatu. Biuro Analiz i Dokumentacji, Wykluczenie cyfrowe w Polsce. Opracowanie tematyczne, Warszawa 2015, p. 3.

29 Official Journal of the European Union, COUNCIL RECOMMENDATION of 22 May 2018 on Key Competences for Lifelong Learning, p. 9 (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&from=en) [accessed May 25, 2024].

30 Ministerstwo Cyfryzacji, Kompetencje cyfrowe; https://www.gov.pl/web/cyfryzacja/kompetencje-cyfrowe [accessed June 17, 2024].

31 Ministerstwo Administracji i Cyfryzacji, Społeczeństwo informacyjne w liczbach, Warszawa 2014, p. 17; https://www.gov.pl/attachment/3481e216-ec1e-4727-8442-253646a56c02 [accessed 17 June 2024].

32 *Ramowy katalog kompetencji cyfrowych*, Warszawa 2016, p. 5; https://depot.ceon.pl/bitstream/handle/123456789/9068/Ramowy_katalog_kompetencji_cyfrowych_Fra.pdf?sequence=1&isAllowed=y [accessed 22 June 2024].

media-saturated world, where reality has become more networked and media-driven[33], and the synergy between the real and virtual worlds is a reality.

Digital competences, encompassing both IT and informational skills, represent a wide range of abilities that go beyond simply using a computer, other electronic devices, or the internet. They also include:

- the ability to use information and data,
- communication and collaboration skills,
- media literacy,
- digital content creation (including programming),
- safety (including digital comfort and cybersecurity skills),
- understanding of intellectual property issues,
- problem-solving abilities,
- critical thinking,
- recognition and effective use of software, devices, artificial intelligence, or robots[34],
- reflective and curious use of digital content,
- skills in accessing, filtering, and evaluating digital content,
- and an ethical and responsible approach to using digital tools.

In addition to the listed skills, the Council of the European Union also emphasizes that "it is essential to understand how digital technologies can support communication, creativity, and innovation, and to be aware of the opportunities, limitations, impacts, and risks associated with them. Understanding the general principles, mechanisms, and logic underlying evolving digital technologies is necessary"[35]. This knowledge, combined with digital competence skills, enables conscious, mature, and reflective use of available technologies, which contemporary society "views as a natural element of the present, with their absence appearing as something inconceivable"[36].

There is likely no need to convince anyone of the importance of digital competences today. Modern technologies surround us daily, and as U. Eco[37] asserts, there is no turning back. They permeate many areas of our lives. Increasingly, accessing public sector services, enhancing one's activity in (digital) society, improving quality of life, or obtaining information depend on one's level of digital skills. The extent to which these competences can facilitate daily functioning and in how many life areas is reflected in the catalog of digital competences, which, according to its authors, includes only the most essential skills within which individuals can define their needs[38].

33 A. Winiarczyk, T. Warzocha, TIK w edukacji…, p. 42.

34 Official Journal of the European Union, COUNCIL RECOMMENDATION of 22 May 2018 on Key Competences for Lifelong Learning, pp. 9-10; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&from=en [accessed 25 May 2024].

35 Ibid.

36 A Winiarczyk, T. Warzocha, *Akademicki proces kształcenia kandydatów na nauczycieli w zakresie stosowania TIK w edukacji w świetle badań studentów Uniwersytetu Jana Kochanowskiego w Kielcach i Uniwersytetu Rzeszowskiego*, "Studia Pedagogiczne. Problemy społeczne, edukacyjne i artystyczne", Kielce 2020, s. 199.

37 U. Eco, *Nowe środki masowego przekazu a przyszłość książki*, W: M. Hopfinger (red.), Nowe media w komunikacji w XX wieku, Warszawa 2005, pp. 538-539.

38 *Ramowy katalog kompetencji cyfrowych*…, p. 10.

Table 2. *Framework Catalog of Digital Competences*

Type of Activity	Activities
Everyday Matters	• Handling official matters without leaving home • Shopping online • Planning trips and travels
Finances	• Managing finances • Buying more affordably • Earning money online
Relationships with Loved Ones	• Fulfilling parental duties • Maintaining social relationships • Taking care of privacy • Managing one's image and information
Work and Professional Development	• Finding a job • Improving professional qualifications • Managing a career • Establishing and running a business • Employing workers • Working more efficiently, conveniently, and faster
Health	• Leading a healthy lifestyle • Using healthcare systems • Obtaining health information and care • Taking care of the health of others
Leisure and Hobbies	• Filling free time • Developing hobbies • Focusing on personal development
Civic Engagement	• Acquiring knowledge about the community, country, and the world • Participating in civic life • Participating in political life
Religion	• Fulfilling spiritual needs • Fulfilling religious needs

Source: Framework Catalog of Digital Competences, Warsaw 2016, p. 11; https://depot.ceon.pl/bitstream/handle/123456789/9068/Ramowy_katalog_kompetencji_cyfrowych_Fra.pdf?sequence=1&isAllowed=y [accessed 22 June 2024].

Numerous documents, both EU and national[39], highlight the need to develop digital competences within society. New government programs are being launched with the goal of "constantly raising the level of digital competences by ensuring that everyone in Poland has the opportunity to develop them according to their needs"[40]. The digital competence development program through 2030 aims to build a modern society and reduce digital exclusion among the elderly or less affluent. The initiatives within this program focus

39 *Zintegrowana Strategia Umiejętności 2030,* Ministerstwo Edukacji Narodowej, Warszawa 2019; https://efs.mein.gov.pl/zintegrowana-strategia-umiejetnosci-2030-czesc-ogolna/ [accessed 20 June 2024].

40 *Program rozwoju kompetencji cyfrowych do roku 2030, projekt*, Warszawa 2019, p. 6; https://docplayer.pl/190215528-Program-rozwoju-kompetencji-cyfrowych-do-roku-2030.html. [accessed 22 June 2024].

on skill development for all citizens—from seniors to preschool children—adding significant value. The earlier we educate children on the wise and safe use of digital technology, the sooner they will become aware of both the opportunities and risks associated with its use, particularly in the virtual world.

Developing digital competences in the youngest generation is now a priority, as this generation is unique. They were born into a world saturated with technology and continuously emerging new digital media. This is the world they know, and it feels natural to them—it is "the living space they were born into, where new technologies are fully integrated into their lives"[41], forming "an essential part of their environment, inseparably connected to it, with the global network serving as a natural and familiar setting where they often operate more skillfully than in the real world"[42]. Numerous factors contribute to this, with the fundamental one being the ubiquity of digital technology, which they encounter from an early age. Generation Alpha children, almost immediately after birth, are given toys and games equipped with voice technologies connected to the internet, which spark their curiosity and capture their attention. The flashing screens, colorful palette, captivating images, and characters—difficult to find in the real world—offer an enticing appeal, leading to significant engagement. According to Jadwiga Izdebska, today's modern media have become a vital part of children's lives, immersing them in the media world.

Developing digital competences in young children has become a priority today, as they represent a unique generation. They were born into a world steeped in technology and constantly emerging new digital media. This is the world they know, and it feels natural to them; it is "the living space in which they were born and where they fully integrate new technologies into their lives", technologies that "are an essential component of their environment, inseparably connected to it, with the global network serving as a natural and ubiquitous setting where they often operate more effectively than in the real world." Many factors contribute to this, with the primary one being the ubiquity of digital technologies, which they encounter from a very young age. Generation Alpha children, almost from birth, receive toys and games equipped with network-connected voice technologies, which spark their curiosity and hold their attention. Flashing screens, vibrant colors, interesting images, and characters—often difficult to find in the real world—offer an attractive appeal, leading to high levels of engagement. According to Jadwiga Izdebska, modern media have become an essential part of children's lives, immersing them in the media world.

In summary, digital competences have become one of the essential requirements of the modern job market and daily life. In the 21st century, digital proficiency goes beyond basic computer skills to include critical thinking, data analysis, online collaboration, and creative problem-solving using various digital tools. Developing these skills is not only a challenge but also an opportunity for improved functioning in a rapidly changing world. Investing in digital education and the continuous improvement of competences in this area is key to future success.

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