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THE USE OF E-LEARNING TOOLS IN TRAINING AND THE DEVELOPMENT OF SOCIAL-DIGITAL COMPETENCES IN THE GENERATIONAL Z GROUP

This paper analyzes the socio-digital competencies developed by Generation Z as a result of using remote tools in education, training, and remote work. The research was conducted with quantitative and qualitative methods, using a proprietary online survey and interviews with students. The survey, created in MS Forms, included closed, semi-open, and multiple-choice questions. One hundred and fifty-one economically active second-year students of Management and Production Engineering at the Wrocław University of Economics in the 2020/2021 summer semester were surveyed. Results indicated that remote learning tools contribute to the development of both social competencies (such as creativity, motivation, emotional intelligence, communication skills, and cognitive curiosity) and digital competencies (e.g., design, use of media and applications, ability to protect information/data, ability to use information/data, and handling AI). As a result, examples of social-digital competencies were proposed, such as proficiency in creative design or the ability to achieve digital comfort. The conscious development of these competencies by the management of modern companies is expected to better respond to the needs of Generation Z.

Keywords: e-learning tools, training, socio-digital competences, Generation Z.

1. INTRODUCTION

Today, we have no doubt that we operate in the era of a knowledge-based economy, in which knowledge becomes the main factor in an organization's success. An important component of this knowledge are competencies, which should be understood as human skills, attitudes and behaviors. In our research, we focus on the development of socio--digital competences in the Generation Z group, i.e. young people who are just entering the labor market. Why socio-digital competences? The answer seems quite obvious - young people surrounded by technology from birth cannot imagine functioning without it, often neglecting the social aspects of functioning that are still important for employers. We would like to point out that these competences can be developed by introducing

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remote tools into the teaching process, which can be used at various stages of education and professional career, making learning more interesting and accessible for young people.

Generation Z, also referred to as C (from the words connected, communicating, content-centric, computerized, community-oriented, always clicking), "iGeneration" or "Net Generation", is a generation brought up in the era of digital technology (Euromonitor International, 2011) which enables you to work, learn and communicate from anywhere at any time. The literature indicates that this technology has become the identity of the Zetas (Singh and Dangmei, 2016), that this generation lives in a virtual space, completely unaware of the world without phones, laptops, tablets, the Internet and other electronic gadgets. Its representatives are able to function simultaneously in the real and virtual worlds, and the smooth transition from one to the other is not the slightest problem for them (in the opinion of Generation Z themselves, both worlds complement each other).

It is clearly visible that today's young people live in completely different conditions than their predecessors from several years ago. The world of the young generation – characterized by unprecedented development of new technologies – is today largely the world of the media, which co-create a powerful media environment. However, the concept of media must now be understood much more broadly than before – it is not only technical means used to record information in time or transmit it in space4, i.e. technologies enabling communication, but also cultural systems – social and cultural practices that support these technologies. accompany5 and are often forced by them. The currently popular term "media convergence" is gaining a new meaning. In the traditional sense, it meant the integration of technology, the best example of which is a mobile phone containing in one housing – in addition to the phone: a camera, a video camera, a TV, a radio, an MP3 player, games and Internet access (Morbitzer, 2012).

These changes should encourage employers, universities and training units to revise the previously used methods of increasing competences, which are often based on traditional teaching methods. Bearing in mind that competences concern the possibility of integrated use of abilities, personality traits, but also acquired knowledge and skills, in order to lead to the successful implementation of a complex mission within the enterprise (Lévy-Leboyer, 1997), they should be developed in relation to the different needs of representatives different generational groups, because development methods that worked in the past may and probably will not support the development of the youngest generations today.

The answer to the question "Why socio-digital competences?" so it seems obvious. Young people surrounded by technology from birth cannot imagine functioning without it, it seems that they cannot even function without it. They are adept at searching and filtering data and information, solving technical problems, using various applications, and communicating online, but they often neglect the social aspects of functioning. We are talking about the development of the so-called soft skills, e.g. communication skills, i.e. the ability to clearly convey thoughts (direct communication without intermediary media), coping with stress, time management, as well as assertiveness, creativity and emotional intelligence. Moreover, Generation Z exposed to multiple stimuli shows problems with concentration, their attention is scattered and the analysis and evaluation of information is very superficial (Mizuko, 2008; Friedrich, Peterson, 2010).

Analyzing the characteristics of the young generation, but also taking into account the phenomenon of the so-called limited concentration (to which Zetas seem to be subject to more strongly than previous generations), we point out that by introducing remote tools into the teaching process (which can be used at various stages of education and professional

career, making learning more interesting and accessible for young people), there will be a simultaneous development of digital competences and social.

More and more often we hear about the so-called "virtual learning environments" (Virtual Learning Environment – VLE). These are educational platforms that allow you to organize and support online learning. However, platforms are not the only tools that support the education of the young generation. There are additional tools that can be successfully used to diversify and enrich classes or training with new opportunities. Our interest focused on tools such as MIRO/Mural virtual boards, Canva, Genially, Quizizz, Kahoot.

Therefore, our goal was to identify socio-digital competences in the generation Z group, shaped by the use of remote tools in the teaching process.

2. GENERATION Z'S DEMAND FOR SPECIFIC COMPETENCES

2.1. Characteristics of Generation Z compared to other generations from the perspective of their competences

Currently, the following generations operate on the market: baby boomers (BB), generation X, generation Y, generation Z (C). Table 1 presents the generation division that is most adequate to Polish realities, taking into account specific age groups.

Table 1. Generations operating in the current labor market

Generation	Year of birth	Age in 2026 roku
Baby boomers (BB)	1946–1964	62–80
X	1965–1979	47–61
Y	1980–1989	37–46
Z (C)	1990– currently	Under 37

Source: (Wiktorowicz et al., 2016).

In the publication, we focus primarily on Generation Z, however, in order to highlight the distinctiveness of their needs and expectations – in the aspect that interests us, related to the development of socio-digital competences – it is necessary to synthetically characterize the earlier generations as well. When describing generations, we focus only on the preferences of specific generations related to the development of specific competences.

Representatives of the baby-boomer generation are characterized by attachment to the workplace, they value clear and transparent rules, remaining faithful to the hierarchical order of the organization. Commitment, patience and independence are their hallmarks. Therefore, they prefer building and supplementing knowledge in the process of self-education, in the most traditional way – through reading. They also value participation in conferences and lectures conducted by specialists and authorities in their field (Łuczak, 2013). Generation X – witnesses of the crisis of the 1970s, people fighting for a better status, achieving their goals on their own – values work that enables success. Xs are reliable, solid, value independence and autonomy, and at the same time fit in well in a group (better than their predecessors). The experiences that shaped them significantly influenced their preferences related to the ways of developing knowledge and skills. In this group, methods that provide the opportunity to independently develop their own solutions,

but also workshop work and case studies, during which they can cooperate as a team, turn out to be useful. The literature indicates that although Y have mastered information technology, they prefer book calendars and archiving documents in a traditional way (Wiktorowicz, Warwas, 2016). Open to both positive and negative feedback, they willingly use coaching as a method to develop their competences (Silberman, Biech, 2016).

Generation Y is the first generation that had access to modern technologies. They grew up in the period of development of websites such as YouTube, Skype applications and social networking sites (Gutowska, 2019). The main Y values are: optimism, idealization, diversity, ambition, creativity, initiative, innovation, education and training. The multitude and variety of stimuli reaching them from an early age have resulted in them mastering the ability to function in conditions of strong stimulation and are able to perform many tasks simultaneously without much difficulty. They gained practice when they were still teenagers, dividing their attention between playing music, writing text messages and doing homework (Wiktorowicz et al., 2016; Waśko, 2016). Generation Y are people used to tests, short-cut thinking, who do not like to waste time. They need constant stimulation and access to new knowledge, so the forms of work they have no difficulties with are searching for answers to questions in online sources, e-learning and webinars, instead of traditional training in the classroom (Gutowska, 2019).

Generation Z, also known as Generation C (from the words connected, communicating, content-centric, computerized, community-oriented, always clicking), "iGeneration" or "Net Generation", is a generation raised in the era of digital technology (Euromonitor International, 2011), which has become – as indicated in the literature on the subject – their identity (Singh and Dangmei, 2016) and which enables work, study and communication from anywhere at any time. Zets, to an even greater extent than their direct predecessors – Y – live in a virtual space, they do not know the world without phones, laptops, tablets, the Internet and other electronic gadgets. Using these devices is second nature to them and allows them to process huge amounts of information at high speeds, which is what they are used to and need (Euromonitor International: Strategy Briefing, 2011). The phone is the main communication tool for Generation Z, but they also use it to take photos, record videos and learn. On the one hand, young people are very comfortable using modern technology and treat its ubiquity and accessibility as something normal. They can function simultaneously in the real and virtual worlds and smoothly transition from one to the other. In the opinion of the Zetas themselves, both worlds complement each other. Constant access to various mobile devices and applications makes communication (time spent on online communication) with others possible from anywhere and at any time. On the other hand, most representatives of Generation Z can no longer imagine life without new technologies and the Internet, to which they are connected 24 hours a day, 7 days a week. They often emphasize that they are addicted to it. Many researchers draw attention to a disturbing phenomenon: young people, living online, impair their verbal communication skills, establishing interpersonal contacts in the real world, i.e. social skills. When exposed to many stimuli at the same time, they also have problems with concentration, their attention is scattered, and the analysis and evaluation of information is very superficial (Mizuko, 2008; Friedrich and Peterson, 2010). Generation Z is much more vulnerable to mental health problems. It has the highest rate of diagnosed depression (Schroth, 2019). This poses challenges not only to potential employers, but also to training units and universities which, in order to reach this group, must verify the methods of teaching, training and development currently used. Therefore, reading the documents from Zeta's point of view will not be attractive or effective. Instead of lectures or scenes, in their

case (as in the case of Generation Y), it is worth introducing online games and simulations that can provide knowledge about the level of competences, and at the same time contain elements of gamification – earning points, prizes, badges, challenges related to the ability to move to the next level. levels, competitions and rankings. Zetas also prefer webinars, videoconferences, and online quizzes, which can be participated in from their phones (Gutowska, 2019). Research shows that Generation Z is connected or online at least an hour a day and up to 10 hours a day. Spends 41% of time outside the classroom/training room on a computer or mobile device (to stay in touch with friends, stay up to date with the news). 1 in 4 likes social media because of its speed and ease of use. Prefers multitasking and using multiple screens to connect and communicate. Accepting new information only through words does not appeal to Generation Z. Watching videos on YouTube, i.e. the multimedia nature of the reception, allows students to go beyond ordinary reading and experience it virtually. They would like YouTube videos to supplement their academic classes. 33% watch online lessons (Seemiller and Grace, 2016).

Figure 1 graphically summarizes the impact of generational affiliation on the hierarchy of media importance for the generations present in the modern labor market. It is clearly visible what transformations have taken place over the years. The book, considered the most important in the Baby Boomer generation, gradually gave way to media such as TV, laptop and telephone until it lost its value in the youngest generation. A desktop computer and a mobile phone, which constitute Generation X's first contact with new technology, significantly change their form in Generations Y and Z, becoming a portable computer and a smartphone. Generation Z also includes a tablet, which provides even greater mobility and convenience of use.

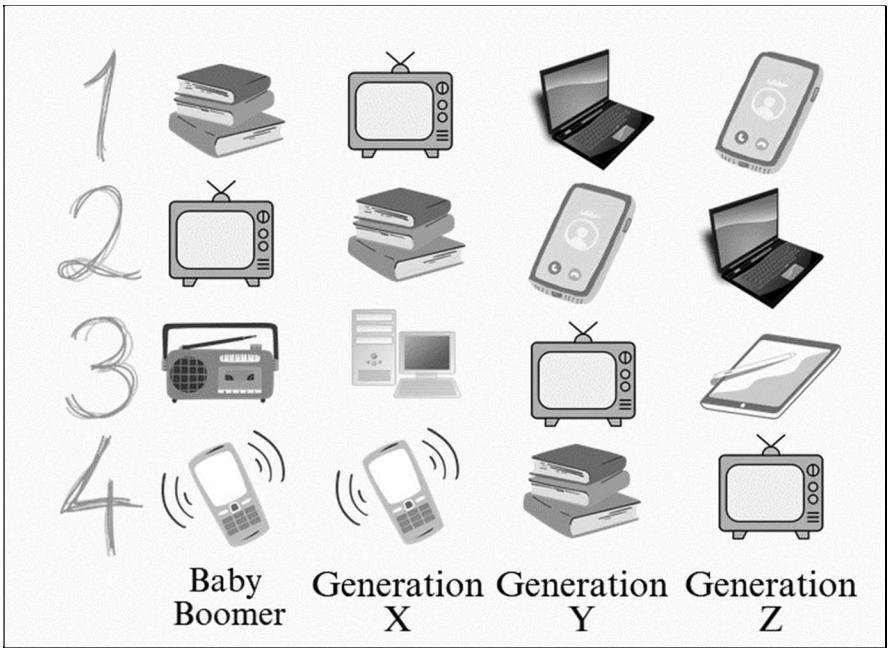

Figure 1. Hierarchy of media importance for generations present on the modern labor market

Source: own study based on: (Sadowski, 2018).

Against the background of the characterized generations (Table 2), we also present how the approach to issues related to development has evolved over the years. As you can see, for the baby boomers and Generation X, developing competences was a condition for maintaining their jobs. We observe an increase in interest in expanding competences from generation Y, which is equally emphasized in the case of generation Z, which interests us.

Table 2. Employee expectations related to training and development

Baby boomers	Generation X	Generation Y	Generation Z
Training and development as a condition for keeping a job. Resistance to change, so it is difficult to motivate them to acquire new qualifications	Training is treated as an employment anchor, enabling employment stabilization.	Lifelong learning is a way of life. A high pace of knowledge acquisition is observed here.	Continuing education. Preferences for self-education. Striving to obtain higher and higher qualifications.

Source: own study based on: (Smolbik-Jęczmień, 2017; Smolbik-Jęczmień, 2013).

2.2. Characteristics of socio-digital competences

The term "competence" in management science appeared with the increasing importance of human capital. This means that the development of competences was not always treated as a priority. Nowadays, it is believed that human resources should "acquire" knowledge continuously, through continuing education. In scientific studies, the concept of competence is used to define "human dispositions achieved through learning. In this approach, competence is understood as a learned [...] – level of efficiency that determines effective behavior in a given field" (Kęsy, 2008). According to C. Levy-Leboyer (1997), competences concern the possibility of integrated use of abilities, personality traits, but also acquired knowledge and skills, in order to successfully complete a complex mission within the enterprise. Bearing in mind that the previously characterized generations currently operate on the market: baby boomers (BB), generation X, generation Y, generation Z (C), it is reasonable to develop these competences in relation to the different needs of their representatives.

Various types of competences are presented in the literature (Kęsy, 2008). In this study, we focus on socio-digital competencies, which in our understanding refer to a general classification that divides competencies into soft (also referred to as behavioral or social) and hard (referred to as technical) (Armstrong, 2011). Soft skills are personal attributes that improve an individual's interactions and performance at work, while hard skills refer to an individual's skill set and ability to perform a specific type of task or activity (Hendarman, Tjakraatmadja, 2012).

Social competences, according to A. Matczak (2005), are "complex skills that determine the effectiveness of emotional regulation and coping with various types of social situations". This definition shows that we cannot talk about one general social competence, but about many types, as we show in Table 3.

Table 3. Examples of social competences

Competence area	Proficiency assessment
Collaborative competences	interpersonal skills, e.g. emotional intelligence, teamwork skills, providing help and support, mitigating conflicts, effective and harmonious cooperation with people, communication skills, creativity, commitment
Social/communication competences	skills in establishing and maintaining contacts, initiating social relationships, cooperation, communication, positive attitude
Social resourcefulness	ability to carry out tasks that require obtaining something from other people, focusing on the goal
Assertive competences	ability to influence others, listening skills, negotiation skills
Mental competences	ability to cope with social situations. They are related to the ability to manage oneself, i.e. the ability to plan, anticipate, cope with stress, time management, as well as the ability to motivate oneself, assertiveness, creativity and emotional intelligence.
Cognitive competences	the ability to sense reality, use language, ability to think, in particular creative thinking (creativity), memory, imagination and feeling emotions.

Source: Own study based on (Paprocka, Terlecki, 2000; Konieczna-Kucharska, 2015; Janiszewski, Krasiński, 2017).

Digital competence can be defined in various terms such as information and communication technology literacy, computer literacy, ICT competencies, technology literacy and digital literacy (Kassim, 2021). According to the definition, digital competences are

> a set of information competences including the ability to search for information, understand it, as well as assess its credibility and usefulness, as well as IT competences, which include the ability to use a computer and other electronic devices, use the Internet and use various types of applications. and software, as well as creating digital content" (Matusiak, 2020).

Table 4 provides examples of these competencies.

The literature indicates the need to develop both groups of competences in parallel, and what is more, social competences are treated as the so-called Transferable competences, i.e. those that can be used in many professional and personal situations. They are therefore particularly useful when performing complex professional activities and solving complex problems, including those that require teamwork. A high level of the indicated types of competences facilitates running a business and may also be a factor supporting the development of entrepreneurship as such. This means that they should be developed simultaneously. Jelonek (2014) points to this when he writes that both groups of competencies are not mutually substitutable, but rather complementary. Nowadays, the development of soft skills should take place not so much as part of specialized courses and training, but thanks to innovative didactics – the learner should acquire hard and soft skills in parallel (Jelonek, 2014).

Table 4. Examples of digital competences

Competence area	Proficiency assessment
Information and data literacy	Browsing, searching and filtering data, information and digital content Evaluating data, information and digital content Managing data, information and digital content
Problem solving	Solving technical problems Identifying needs and technological responses Creatively using technologies Identifying digital competence gaps
Safety and security	Protecting divides Protecting personal data and privacy Protecting health and well-beeing
Digital content creation	Developing digital content Integrating and re-elaborating digital content Copyright and licenses Programming
Communication and collaboration	Interacting through digital technologies Sharing through technologies engaging in citizenship through digital technologies Collaborating through digital technologies Managing digital identity

Source: Own study based on (Kassim, 2021).

3. E-LEARNING TOOLS AS A TRAINING ELEMENT

E-learning in scientific literature is presented primarily in the context of distance education at various levels of education. This concept increasingly began to occupy the attention of various authors after the outbreak of the COVID-19 pandemic. The terms e-learning, remote teaching or distance learning can be used not only in the educational context, but also as part of training at universities and in the workplace. In the case of e-learning forms, we can distinguish a vertical system in which there is a teacher/trainer - student/listener relationship. In addition, horizontal communication: student-student or listener/listener may play an important role. In these times of threat, when travel and contacts between students are limited by nature, remote cooperation can bring tangible results. This is written by, among others, M. Masterson (University of Limerick, Ireland), who organized long-term online cooperation in learning a foreign language between students from different countries and cultures. It turned out that a well-designed course and its efficient implementation resulted in similar positive results among students as before the pandemic (Masterson, 2020).

E-learning is now becoming an effective tool for gaining knowledge and improving qualifications. In the 1990s, the first e-learning platforms were created. Their main task was to manage training in the organization (Palka, 2014). The use of e-learning in the context of training conducted at students' homes and remote education became possible after connecting computers/laptops to modern communication technologies. These changes made it possible to conduct distance courses and adapt the courses to the needs of their recipients. A smooth flow of information requires the creation of specialized tools

with a high degree of interactivity. To enable these systems to cooperate, it was also necessary to develop new standards unifying the method of data storage and presentation (Moliga, 2015). The rapid development of the Internet and the ongoing computerization of society have become the main reasons for the rapid development of distance educational services. These changes enabled the creation and dissemination of so-called e-learning platforms, i.e. software sets enabling online classes and remote support for students. The term "virtual learning environment" (VLE) is increasingly being replaced. This concept is more general and covers all processes related to online teaching. Educational platforms are computer systems that allow you to organize and support teaching via the Internet. We also call them the abbreviation LMS, which comes from the English term Learning Management System. The basic tasks of these systems consist in collecting teaching materials, organizing them and making them available to recipients via the Internet. E-learning platforms are extensive applications that facilitate the creation, running and administration of educational courses. These are, in fact, integrated sets of tools that allow you to achieve more specific goals related to teaching, in particular with managing the course and its resources. This is a specialized website with a didactic profile. It usually consists of a portal part – information, available to everyone, and a zone of authorized access to knowledge resources and communication tools. The basic functions of the e-learning platform include: providing authorized users with didactic content intended for them, providing space and tools for the implementation of the educational process, enabling tracking and assessment of progress in the educational process, administering didactic content, users and their groups and access rights, and also generating statistics (Dąbrowski, 2013). Currently, the most popular e-learning platforms include MsTeams, Zoom and Google Meet.

Most of the e-learning platforms used so far provide materials mainly for individual study, after which students take various forms of assessments also individually. Group communication was and is often reduced to the exchange of correspondence in an asynchronous mode or to online text chats in a synchronous mode. However, if you look at the percentage of synchronous and asynchronous work, the former was only partial.

However, platforms are not the only tools that support remote education and training. There are additional tools that can be successfully used to diversify and enrich classes or training with new opportunities. The authors' interest in the work focused on examples of several types of tools used for teamwork, individual work or to check students' knowledge. They are presented in table 5.

Each of the tools indicated in Table 5 is tailored to appropriate tasks and thus develops different sets of competences among their users. Among the large group of tools that support the educational process, we would like to show several examples, e.g. virtual whiteboards, tools for designing, creating visual and interactive content or for conducting knowledge tests. It is worth pointing out that the young generation, which needs constant stimuli, is a grateful recipient of this type of solutions. Referring to the concentration curve, according to which after about 20 minutes the listener in the training or the student at the desk loses interest, these tools allow the listener to be reactivated.

Table 5. Description of the use of selected e-learning tools

Type of tool	Characteristics
Miro/Mural virtual boards	Scaled, cross-device-ready electronic whiteboards that enable real-time collaboration in distributed or fully remote teams.
Canva	It allows you to create graphic designs using a database in the form of a library of templates, which can be quickly, easily and intuitively modified. Among other things, the tool allows you to create inforgraphics, multime-dial presentations, posters, resumes or flyers.
Genial.ly	The tool helps create interactive content, multimedia presentations, in-graphics, games, escape rooms and reports. It allows aggregating multiple contents simultaneously on a single slide in a clear and minimalistic way.
Wordwall	It allows you to create online and offline exercises and interactive tasks. In addition, it allows you to use available templates and edit them as you see fit.
Quizizz	Lets you create quizzes and use already available templates for your own use. The tool is used to create pre-tests and post-tests.
Kahoot	The tool is used to create games, quizzes, ask questions organize votes. Checking the effects of cooperation is possible thanks to the possibility of generating reports.

Source: Own study based on (Canva, 2022; Genial.ly, 2022; Kahoot, 2022; Miro, 2022; Mural, 2022; Quizizz, 2022; Wordwall, 2022).

4. RESEARCH METHODS USED

The adopted research procedure was based on the analysis of secondary and primary data. The first one included literature research. The analysis of primary data included: a survey and informal interviews - it was therefore both quantitative and qualitative in nature. For the purposes of the study, an original online survey was developed. The survey contained three types of questions, i.e. closed questions with suggested answer options, and semi-open questions in which the respondent, in addition to choosing the prepared answer options, could also enter his own answer. The answers to the questions were presented graphically and descriptively due to the nature of the questions asked.

When formulating the survey, the authors tried to obtain answers to the following questions:

- Did the tool used contribute to the development of new competences among students?
- What competencies did students develop by working with remote tools during online classes?

The survey was prepared in MS Forms and conducted using the indicated application. A total of 151 students studying at the Faculty of Production Engineering at the Wrocław University of Economics (Poland) were surveyed. In the study group, the respondents included both women, who constituted 66%. respondents and men 34%. The analyzed group is people aged between 21 and 28. These were second-cycle students studying full-time (54%) and part-time studies (46%). The study group included both professionally active (76%) and unemployed (24%) students. The period of the study was the summer semester 2020/2021.

5. RESULTS OF THE RESEARCH CONDUCTED

During the research, the authors asked what tools the respondents used during their education. As can be seen in Figure 2. We assume that this distribution of responses – with the predominance of responses to virtual whiteboards – results from the fact that academic staff have been trained in their professional use. At the same time, these are tools that are very often used in business practice. Boards are technological solutions that guarantee effective remote work for project team members, the ability to transfer and collect data, and constant access to it. As for Quizizz, according to the intention of the application's creators, it can - as indicated above – be successfully used to create pre-tests and post-tests, which are a very common element of trainers' training activities. This is about the possibility of checking the knowledge level both before and after the training, which is to show knowledge gains.

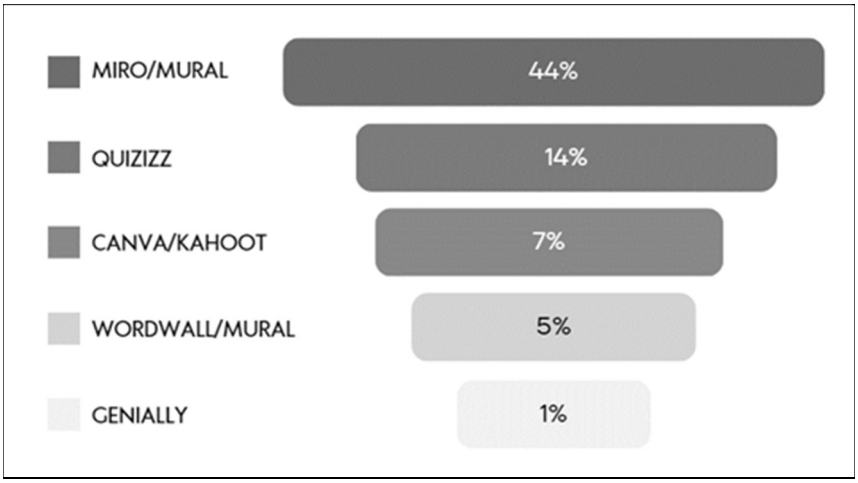

Figure 2. E-learning tools used by respondents

Source: Own study.

Next, the authors asked the respondents whether the use of these tools contributed to the development of their new competences. Respondents indicated (Figure 3) that these tools develop, among others, creativity, motivation, emotional intelligence, communication skills, cognitive curiosity – as part of social competences, and design, use of media and applications, ability to protect information/data, ability to use information/data, AI support – as part of digital competences.

As the figure above shows, based on the respondents' responses, the authors created the concept of social and digital competences, naming them appropriately. This is how the competencies were created:

- creative design,
- perseverance/consistency in using digital tools,
- the ability to achieve digital comfort,
- ability to transfer knowledge within a team and openness to new solutions.

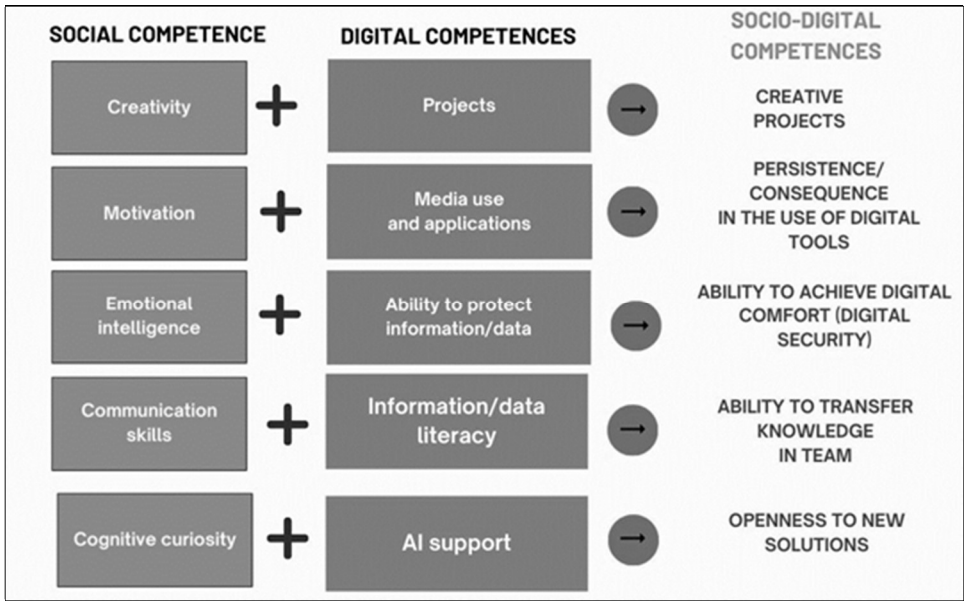

Figure 3. Selected (new) competences developed by remote tools - respondents' perspective
Source: Own study.

The indicated elements are summarized in Table 6, taking into account the competencies that they develop the most among the respondents.

Table 6. Socio-digital competences developed by e-tools

SELECTED TYPES	MIRO/ MURAL BOARDS	CANVA	GENIALLY	WORDWALL	QUIZIZZ	KAHOOT
CREATIVE PROJECTS		✓	✓			
PERSISTENCE/ CONSEQUENCE IN THE USE OF DIGITAL TOOLS	✓	✓	✓			
ABILITY TO ACHIEVE DIGITAL COMFORT (DIGITAL SECURITY)	✓	✓	✓		✓	
ABILITY TO TRANSFER KNOWLEDGE IN TEAM	✓	✓				
OPENNESS TO NEW SOLUTIONS	✓	✓	✓	✓	✓	✓

Source: Own study.

The table above shows that the analyzed tools influence the development of socio-digital competences in various ways. As you can see, individual tools such as Canva and Genially develop creative design, and miro boards support the transfer of knowledge within

the team. It is worth adding that all tools increase openness to new solutions among surveyed respondents, and only some of them – Miro/Mural Boards, Canva, Genially and Quizizz increase the ability to achieve digital comfort.

6. DISCUSSION

Given the nature of Generation Z, traditional, subject-based methods of teaching information and digital literacy may not be very effective. It is crucial to adapt the form of the message to the modes of communication preferred by young people, including taking into account the importance of mobile devices. The use of pop culture elements, current symbols important to the young generation and modern communication models can help better prepare Generation Z in terms of digital and social competencies. A good solution may be the integration of educational goals – the implementation of projects that combine the learning of digital skills with other, practical goals, where technology supports the achievement of multidimensional results. Meanwhile, Polish schools often continue to ignore the potential of mobile technologies, formally limiting their use. This stands in contrast to Generation Z's natural need for constant connection and access to up-to-date information (Stunża, 2017).

As early as 2011, students expressed interest in remote forms of learning. Surveys conducted by M. Przybyla (Przybyla, 2021) indicate that their attitudes toward remote learning in universities were positive, even though the educational proposals at the time were often modest. Among more than 1,000 students at Poznań universities, as many as 58% declared their willingness to use remote learning methods and forms.

An interesting aspect is the results of the study on the relationship between the form of instruction (online vs. traditional) and the final grades obtained. The analysis was carried out on the basis of grades for the course “probabilistic methods and statistics” in the course “computer science” at the School of Banking in Gdansk. The results of the summer semester 2018/2019 (traditional classes) and 2019/2020 (remote classes taught synchronously on the Click Meeting platform using Moodle tools) were compared. In both cases – both full-time (from 3.59 to 3.83) and part-time (from 3.57 to 3.97) – there was an increase in the average grade for classes taught remotely (Wałachowska, 2021).

Regarding Generation Z's demand for remote work, it is worth citing research conducted by Capgemini in 2021. They indicates that remote work has become an equivalent form of work in professional reality. It turns out that 75% of organizations expect that at least 30% of their employees will work remotely in the next few years. In addition, approximately 70% of companies expect to benefit from reduced costs related to property maintenance and management and reduced business travel. However, the Capgemini report shows that despite the increase in productivity, employees are reluctant to work remotely permanently because it has a negative impact on their psychophysical condition. It turned out that the feeling of constant availability has a negative impact on employees. Most employees felt concerned about the long-term consequences, and half of new employees said they would quit their jobs if the only option presented to them was to work remotely. About 56% of the surveyed people were afraid that they would work without breaks for rest or personal life, and 60% young workers (aged 26–35) expected more support from the employer to cope with stress. The research shows that there is a big problem with accepting remote work by an employee. This suggests focusing on developing competences that would help reduce the stress resulting from this form of work, which in turn may lead to burnout even among people representing Generation Z. As

indicated above, in the case of the generation described, it is rest, self-development and personal life that have crucial and without harmony between these areas of life and remote work (including remote training), employee effectiveness may be lower and their willingness to work reduced. The report shows that in order to achieve the best benefits of remote work and manage employee expectations well (including those of the Generation Z we are interested in), organizations need to find the right operating model and a more sustainable, hybrid approach. One such effort by companies may be to focus on shaping the competencies we analyzed.

In 2023, a survey was conducted which illustrates the approach to work – including remote work – of students of the Faculty of Economics of the University of Gdańsk. Its aim was to determine what the young generation considers when choosing a professional career. The study referred, among other things, to determining preferences for the scope of cooperation with other employees. The responses were quite even, as 47% of people preferred teamwork and 53% preferred working alone. The preferred scope of creativity in the workplace was further explored. The answers to this question were also similar: over half (51%) prefer to have the opportunity to approach the tasks performed creatively, and the rest (49%) prefer to work based on certain patterns. Then, respondents were asked whether they were ready/inclined to sacrifice private time for professional work. The least popular were the answers regarding a greater willingness to devote private time: the answer "I am always willing" was chosen by 3% of people, and "I am often willing" by 21%. The most frequently chosen answer was "occasionally I am willing" (52%), followed by "I am not willing" (24%). The last task for the respondents was to arrange the motivators for starting and doing work, in order from the most to the least desirable. When choosing a career, respondents are most often guided by the amount of basic salary (61%), the availability of flexible working time (25%) and the possibility of working in a pleasant atmosphere (18%). Next came: job security, remote/hybrid work, opportunities for promotion and training (Konkel, 2023). This suggests that the socio-digital competences that Generation Z should develop as part of the currently decent remote work and remote training require continuous development. The work preferences determined in the study (by this generational group) indicate that their motivation and willingness to use modern solutions is lower than expected. Therefore, it can be concluded that while it is important for employees, including the Zetas, to be able to build relationships and maintain mental well-being while at work, education and the use of its remote forms is attractive when it takes place at a distance.

As described in the theoretical part of the work, subsequent generations differ significantly from each other. Therefore, it is necessary not to take shortcuts and make it as easy as possible for the youngest to achieve their teaching goals, but to adapt teaching methods to their skills. The current teaching methods used in working with representatives of Generation Z are ineffective. Therefore, it is reasonable to reach for the technological and digital achievements of the modern world, which are a natural tool for young people not only for work or study, but also an indispensable prop used in everyday functioning. Such behavior can undoubtedly contribute to increasing the attractiveness of the presented teaching content and, consequently, increasing the effectiveness of the teaching process. Additionally, these types of tools save both time and costs. For example, webinars and videoconferences enabling synchronous online learning combined with other tools, such as online quizzes, eliminate the need to travel to traditional lectures or exams and allow for faster verification of training effects.

Many studies have examined student satisfaction in synchronous online courses (webinars), asynchronous online learning management systems, and synchronous face-to-face classroom interactions (traditional learning). The results showed that webinars were descriptively more effective in promoting student learning than asynchronous online classes (Hedges' g = 0.29) and face-to-face classes (g = 0.06) (Ebner, Gegenfurtner, 2019).

It should be noted that the remote tools we describe to support the teaching process can be successfully used both during online and traditional classes.

Gutkowska (2019) points out that when preparing development activities, we cannot forget about the specificity and competences of generations present on the labor market for a little longer. Due to this, especially in groups consisting of representatives of different generations, online tools cannot completely dominate the training process and completely eliminate more traditional forms. Moreover, despite the undoubted attractiveness of new methods, in addition to knowledge, social competences are crucial on the labor market, which, according to the author, Internet tools are unable to develop. Hence, in the researcher's opinion, group interactions and discussions remain very valuable.

However, our research shows the development of both social and digital competences thanks to the introduction of the analyzed tools into the teaching process. Their use, as students indicated, was conducive to, among others: development of creative design which is a combination of creativity (social skills) and design (digital skills)

The market for training services should be shaped in such a way that the forms of teaching used respond to the expectations of representatives of different generations, while developing their knowledge, skills and social competences. Nowadays, employers provide employees with a variety of tools, arranging office space in such a way as to ensure comfort of work and stimulate creativity, they give freedom to work remotely, therefore it is possible to accomplish this task without any major difficulties through blended learning, i.e. combining traditional methods with education. using online tools (Gutkowska, 2019).

7. CONCLUSION

The result of the research became the proposal of a certain construct consisting of the analyzed competencies. Consequently, examples of social-digital competencies were proposed, such as creative design and the ability to achieve digital comfort. The conscious development of these competencies by the management of modern enterprises can respond to the development needs of the Zetas.

We are aware that tools discussed do not develop all socio-digital competences to the same extent. Their use undoubtedly promotes the development of communication, teamwork and design. However, their selection must be adapted to the subject and purpose of the training, the potential of the listeners and the trainer's preferences. Regardless of which competencies will be developed thanks to their use, they always provide added value for the listener. They are useful, for example, in diversifying activities, restoring distracted attention, they affect the sense of sight and hearing, which favors the involvement of people who perceive stimuli in a different way. This allows the interviewer to adopt the perspective of the interlocutor (the so-called ability to decenter). They also save time, allow you to quickly obtain information from many participants, but also create summaries and rankings that motivate listeners.

In addition, the socio-digital competences indicated in the research correspond to the currently popular competences of the future, such as: active learning, creativity, innovation and initiative, as well as the use, monitoring and control of technology. The Polish Institute

of Economics in the publication "Employee competences today and tomorrow" indicated that the valued competences in the future will be digital and technological competences, as well as social competences related to functioning in a group (e.g. emotional intelligence and leadership) and cognitive competences, also called competencies thinking, i.e., among others innovation, logic and solving complex problems. Transformative competences are also important, e.g. allowing for reconciling tensions and solving dilemmas, as well as adaptive competences (e.g. acting in a situation of uncertainty). Soft skills, next to technological ones, are a basic competence of the digital world. This is one of the topics that appeared in the EY panel: "ESG Perspective and HR Challenges" during the European Financial Congress 2022 (Jakóbczyk, 2023).

Generation Z is strongly attached to the digital world, therefore organizations/universities must support the development of new competences (compromise of interests). Generation Z has never lived in a world without mobile devices, they expect to be able to keep all these gadgets when going to work. They prefer organizations that are at the forefront of workplaces and that support and allow them to work regardless of geographical location and time zone barriers. (Singh, Dangmei, 2016). University authorities encourage educators to use technology because they believe this is what today's students want. They understand that times have changed from the industrial era model and their universities should follow what is current to meet the needs of their students. Universities are trying to keep up with modern technologies to increase communication with students using modern technologies (Feiertag, Berge, 2008).

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