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DEVELOPMENT OF DIGITAL COMPETENCIES OF THE GENERATION OF YOUNG TEACHERS IN KAZAKHSTAN

Abstract

The article discusses the phenomenon of socialization of modern adolescents on the internet, the current state of the existing media space, the paradigm of which determines the new digital life of society. Today's internetization, which has a global character, has become an integral part of all spheres of society's life. Therefore, the question of studying the aspects and mechanisms of its influence in science is causing a very acute content. As a result of digital socialization, the socialization of Generation Z is manifested by its active participation in the assimilation of norms and values. The features of Generation Z as the main audience of media consumption in the risk zone are determined as a result of the social negative impact of the descriptive internet on the basis of domestic and foreign scientific paradigms. The authors also studied the phenomenon along Generation Z, taking as a basis the field of Sciences in a close correlation between

socialization and through the lens of media pedagogy, a new vector of research. Within the framework of this approach, the internet socialization of the «new generation» considers the possibilities of influencing the solution of problems based on the possibilities of paying special attention to education and its methodological basis.

Keywords: young teachers, digital competencies, generation Z, teachers, digital socialization, social capital.

Introduction. The digitalization of society in Kazakhstan has led to the widespread use of information technologies across all fields. As part of the “Digital Kazakhstan” state program, there has been an increased focus on improving digital literacy among the population (Cifrovoy Kazakhstan, 2017). The digitization of education is a significant trend in Kazakhstan’s education reform. The concepts of “Generation Z,” the “digital generation,” “network generation,” and “digital natives” refer to the generation of young people growing up with digital technologies embedded in their education, careers, and daily lives. There are open questions about how scientifically grounded these concepts are. Intense debate continues around the characteristics of the digital or network generation. A representative of the digital generation possesses essential social and professional competencies that are in demand in the digital society. Digital or “smart” technologies are central to modern technological advancement and will retain a leading role moving forward (Sapa, 2014). Digitization represents a deep convergence of digital technologies with material, social, and humanitarian technologies and practices, including education. Understanding the role and place of digital technologies is essential for any modern professional field. The interactivity, multimedia capabilities, hypertextual nature, customizability, and other features of many digital technologies allow for focused and personalized teaching and learning suited to the digital age. According to research by foreign scientists, the rapid transition to distance learning has raised questions about how best to support student learning and deliver impactful teaching of new material (Ugol’kov, 2012). The above analysis comprehensively describes personal development in the digital society. Most importantly, it establishes that this type of competence is necessary for all individuals in the modern information society. Pedagogically, a teacher’s digital literacy can be understood as having a certain level of knowledge in this field, mastering digital education content, being aware of digital education resources, or effectively

using digital technology platforms within their profession.

Materials and methods. The new educational standards in Kazakhstan require teachers to create an educational process that capitalizes on the full potential of the digital learning environment. A school’s digital learning environment encompasses educational information resources, information and communication technologies, and modern pedagogical methods and technologies. Compared to traditional instruction, digital learning environments have certain advantages:

- increasing educational choices, forms, and pacing for students;
- enhanced access to varied information;
- greater student motivation and interest in academic subjects through interactive and visual content;
- developing independent and critical thinking skills;
- fostering student initiative, abilities, and interests (Pleshakov, 2013).

Teacher and student collaboration enables the learning process. Careful consideration should be given to appropriate educational technologies based on student age, abilities, preparation, and the teacher’s competencies. The cooperative learning principles reflect the nature of interactions between education process participants. The main principles are:

- democracy (freedom of choice, equality);
- openness (freedom of criticism);
- alternative (multiple pathways);
- dialogue;
- reflexivity (clear goals, content, methods).

The teacher evolves from demonstrative teaching methods to activity-based approaches where students engage in motivated, conscious learning (Luchinkina, 2013). The teacher acts as an organizer and coordinator rather than an information provider. The substantial gap between the pre-digital and digital generations in education must be addressed. On the one hand, teachers from the digital generation may need help effectively incorporating technologies. On the other, it is evident that the digital

generation needs more readiness to transition to digital education models. The characteristics of the digital generation (perception, memory, thinking, motivation, behaviors, worldview) shape the psychological, pedagogical, content, methods, and principles of digital didactics. Understanding the potential adverse effects

of digital technologies on child development, socialization, and learning is critical. However, awareness of the strengths of the digital generation allows for practical education approaches tailored to “digital learners” (Figure 3) (Luchinkina & Zeker’yaev, 2019).

Table 1. *Description of representatives of the digital generation*

Representatives of the digital generation («Generation Z,» «processor children,» «tablet children,» «children’s chips,» digital natives - «digital residents») are typical:
From the point of view of cognitive development - a mosaic of thinking («clip»), lack of attention (to details (can focus on one topic for no more than 8 seconds), inability to read and understand significant texts, limited vocabulary, mixing of real and virtual space («changing view of the world»), poorly developed creative imagination, the illusion of «reversibility of life»
From the point of view of emotional-volitional development - the poverty of sensory experience, simplified view of reality, perception of real life as «too boring» and «too slow,» impatience and the need for immediate rewards, inability to work systematically
From the point of view of social development - infantilism (developed intellectual balance between social and personal development), individualism, belief in one’s uniqueness and uniqueness, reduced need for life, communication, unwillingness to cooperate, focus on one’s inner world, hyper pragmatism and hedonism, vague and unstable moral and ethical ideas
In general, the leading role of online socialization in the process of forming an individual as a «reference group» at all stages of online growth, establishing left-wing models, and shaping social trends

At the same time, online socialization as a factor in personality development is growing dramatically across the digital generation. Although spontaneous, online socialization processes can and should be managed pedagogically.

Key educational challenges center on addressing problematic characteristics sometimes exhibited by the digital generation. These traits reflect deficiencies in social competence rather than personal shortcomings. Targeted efforts can fill these “knowledge gaps” (Figure 4).

Table 2. *Features of representatives of the digital generation*

Representatives of the digital generation	In terms of social development	In terms of cognitive development
Members of the digital generation tend to have many critical positive characteristics, often exceeding those of pre-digital generations	Striving for self-expression, preference for «horizontal» (partnership) type of «vertical» (hierarchical) relations, openness to intercultural and international relations, but also (with some caveats) reflected in optimism and self-confidence	Constant striving for novelty and self-improvement, creativity, ability to synthesize different types of thinking, ability to process non-linear, parallel streams of different information (multipurpose), tendency to use different sources of information, independence in information processing

A root cause is a lack of supervised technology use from an early age. This creates the illusion that children require less attention and engagement

from parents and caregivers. In these cases, child development is primarily dictated by active, and often aggressive or antisocial, online influences

rather than traditional socialization institutions like family. Early gadget adoption does not substantially change developmental trajectories in families where technology use is balanced with interpersonal interaction and digital media literacy (Luchinkina, 2015).

Advanced and underdeveloped groups are apparent within the digital generation. The progressive group displays heightened educational autonomy focused on self-education, expression, and development. They shape their educational pathways where possible, combining study, work, and personal growth.

Overall, effectively educating the digital generation requires accepting that integration into traditional paradigms is likely infeasible. Fundamental transformation is needed to create new, genuinely digital education models. Despite successfully adapting to technologies in their personal life, many teachers retain traditional mindsets that education should remain separate from digital spaces.

Sociologists note that new generations emerge roughly every 20 years with distinct characteristics from previous ones. Discussion currently centers on Generation Z. Generational theory incorporates both primary (Generation Z) and secondary (Baby Boomers) components. In 1991, American researchers Neil Howe and William Strauss first delineated differences across age generations based on values manifestations during specific periods (Zeker'yaev, 2019; Hodenkova, 2018). Each generational period spans approximately 20 years.

In Kazakhstan, precise statistical data on generational shifts needs to be included. However, real-world experience echoes Generation Z theory. Generational belonging depends on birth year and adjacent influences like skills, lifestyle, work styles, values, and aims.

Generation X people born from 1963 to 1983. Their characteristics are people who can rely only on themselves, think differently, know what is happening in the world, and are ready to make choices and change themselves. Their work is challenging, and they aim to achieve success. They work in the same field for many years and gradually reach a high level in their career (Vazhenina, 2018).

Generation Y - people born between 1983 and 2000. Their understanding of goal achievement and success is different: in most cases, they do not like to start their professional growth from a lower level (Beshtokov, 2018). They aim

for immediate growth, and this is one of their weaknesses. People of this category work in several fields simultaneously, strive to learn as much information as possible, and become professionals. It is only possible for them to serve in one field. Generation Y is the hope of modern business. They are the most technically competent and distinguished by their willingness to work outside of working hours and enthusiasm for education. Some experts say Generation Y will become the primary workforce in the next decade.

Generation Z is today's youth, born after 2000, who know the language of technology. It is too early to assess what kind of person these people will be when they grow up from the point of view of professionalism; that is, it has yet to be known what they will be like in the future - the generation is just being formed. However, now they are considered unique—indigo children. Children are born with special talents, philosophies, and worldviews, with gadgets in their hands. However, they can be called real «digital children». They should ensure the economic recovery of our country. Motto: «Listen to me, understand me, talk to me, appreciate me» (Genner & Süss, 2017).

Representatives of Generation Z do not read books, walk less in the yard, and prefer to play football on the computer rather than go out on the field. For them, the computer is a natural habitat. They usually only read a few books; this is not their source of information; they get all the information from their smartphone, and Google knows everything. Generation Z, not in a hurry to start a family and grow up, worked earlier and tried to build their career. We cannot convince them with other information; you cannot convince them that you study poorly, and then you will become a worker who says, «Come, come, and come.» After a few years, representatives of this generation will come to the leadership and start to replace the older generation. Their demand is one - responsibility, justice, and freedom. Generation Z — 63% of men versus 61% of women want to be leaders. Generation Z does not see the difference between the real and virtual world. Right now, our country is educating the generations of this generation. Therefore, let us talk about how we educate and inform the representatives of this generation.

According to psychologists, children of the 21st century are different from their peers of the

previous generation. Today, they have two main features. First, they are brilliant, understand quickly, and accept and understand many things foreign to the adult generation. Secondly, they are susceptible and vulnerable. In this regard, traditional education methods may not be suitable for today's children. Until then, 3-5 minutes have been given for the organization period according to the lesson plan. Moreover, we need to translate the enthusiasm of students of Generation Z into the lesson within 8 seconds. Otherwise, the quality of the lesson will deteriorate (Stillman & Stillman, 2018).

Research materials and methods. Generation Z are digital kids and need to send links to information to improve learners' knowledge. Because this is a visual generation, YouTube is the primary source of information they consider reliable and safe. Alternatively, it is necessary to make a «revolution» on the internet and give homework to children in an exciting format; for example, they use a method that requires them to publish it on Instagram, click on it, and write a comment.

Generation Z is a generation that emphasizes practice over theory. They need to know why the teacher gives actual knowledge and how it can be helpful in life. If you introduce the structure of fish in biology class, tell them how to choose a new fish in the additional store, or provide exciting information about fish, this will increase the student's interest.

Generation Z is a do-it-yourself generation. The role of the classical educator will soon disappear by itself. It is necessary to improve the number of educational sites, providing various exciting and helpful information for the Z generation, which prefers to attend additional courses and clubs, study at a distance, and receive further education. For example, he likes to learn to play the tambourine by getting accurate information on YouTube rather than going to a tambourine club and learning to play the tambourine. We need to develop a method to increase interest in the same subject.

Generation Z does not trust other people's experiences. Tell them how and what to do. Then, they often like to do individual tasks.

Important information for raising children of Generation Z:

1. Gadgets are an integral part of a modern person's life. Therefore, it is not necessary to try to

isolate the children of Generation Z from getting information from the internet and isolate them from technology; on the contrary, teach them how to use such devices, how to get the correct information from it, how to properly understand and organize the received information.

2. Spend more time with children and pay attention to show them that life can be interesting. This is an excellent way to prevent alcoholism, drug addiction, and other addictions.

3. Show respect in communication with children and allow them to express their opinions.

4. Teach the child to be compassionate and understand the feelings of others.

5. Do not try to fulfill the child's needs at the first word: this does not allow him to develop his needs correctly.

6. Teach others to be independent and praise them for effort and success, even the most minor achievement.

7. Do not interfere with his play; if possible, play with him.

Results. From a terminological standpoint, competing subject-object and subject-subject approaches exist regarding socialization. The subject-object conception focuses narrowly on societal adaptation with individuals passively shaped by external forces. By contrast, subject-subject formulations emphasize individual agency in actively impacting surroundings and self-trajectory throughout constant interaction with environmental conditions across life stages (Bogacheva & Sivak, 2019). However, the continuous evolution of the media space, transforming perceptions of reality, complicates traditional socialization understandings by incorporating additional elements like media and internet-based socialization. Although boundaries across concepts blur somewhat, critical differences persist. Broadly, «media socialization is a person's acquisition of social experience mainly based on artificial media presentations», but what is essential is that the subject is «in a state of non-participation of the socializing environment in this process» Internet-based socialization relies on devices enabling continuous networking with public entities (Mudrik, 2016). A.I. Luchinkina's research details a pathway for internet-based values development constituting online socialization theory (Ivanova, 2015). This phenomenon manifests once ideas around internet purpose

and functionality consolidate within individuals. User motivations subsequently coalesce to unleash creative potential. Luchinkina's proposed three-stage model of Internet socialization consists of pre-internet, initial, and primary phases (Yudina, 2008). The pre-internet period involves forming basic internet perceptions and attitudes. Individuals employ simple online capabilities like information searches, gaming, forums, and messaging during the initial stage, primarily as content consumers. At the final stage, users start producing original materials as "virtual personalities" develop (Mityagina & Dolgoplova, 2009). Relative to offline spaces, personal initiative constitutes a pivotal internal catalyst propelling online socialization processes (Posnick-Goodwin, 2019).

Hence, internet-based socialization entails more than expanding social horizons through online sociocultural participation (Fedorov, 2015). Movement across communicative realms signifies re-socialization, enabling the adoption of new social standards. The internet's function radically transforms from a socialization factor to a socialization agent, strengthening user impacts. However, constructive (self-expression, communication skills) and destructive (violence, antisocial conduct) consequences stem from internet influence, depending mainly on individual detection, isolation, and mitigation capabilities regarding negative pressures.

Conclusion. The internet represents not just a component of virtual terrain but also modern media embodiment spanning media pedagogy and spaces. Internet-based socialization relies on media spaces establishing online networks as impactful sociocultural designators influencing social practices and representations across media production and consumption systems.

Intentional internet-based socialization fuels monumental socialization paradigm shifts challenging traditional conceptualizations. Rising generational power transfers from parents and teachers to bloggers and YouTubers dictating spiritual and material adolescent preferences signify one transformation aspect. Another concern is the replacement of traditional socialization agents by online entities disseminating altered youth values. Target reorientation persists, with teenagers pursuing online entertainment profits, followers, and content that induces public reactions. Internet socialization continues to conquer new spheres, surpassing consensus perspectives while commanding primacy regarding Generation Z

as the dominant consumption and production cohort.

The analysis of scientific research on the problems of the characteristics of modern teenagers made it possible to identify the following dominant «new people» characteristics of the generation: fragmentation of thinking and «clip mind.» Spending much time on social networks, «zetas» receive information sketchily, going from «post to post.» Sapa A.S. (2014) believes that for members of this generation, «the format of mini-news, Twitter and statuses are more familiar,» i.e., information in the form of compressed fragments showing only the essence of the news, its central message, and meaning. From this feature comes another one - adjacent but meaningfully different - «clip consciousness.» Terminologically, the definition refers to «the ability to briefly and colorfully perceive the world around us through a short, vivid message presented in a video clip, television news, or other similar form.» «Zetas» are focused on processing small amounts of information, so they rely on notes, comics, and other texts «placed on one screen.» The same group includes Doll Stillman's so-called phygital world, which means that the boundaries between the real and virtual worlds are changing rapidly for members of Generation Z. Ordering food through a mobile app or real-time GPS capabilities is considered familiar. According to the author's concept of D. Stillman, the «phygital world» can be represented as the following formula: «Physics + Digital = Phygital.» Thus, physics and digital, which means combining two realities - physical and virtual». Scientifically interesting is a feature such as Fear of Missing Out or the «missing profit syndrome» described by D. Stillman (2018). Today's teenagers want to be informed about everything happening not only at the global level but also at the level of relatively minor interest groups. Zetas sees the news everyone is talking about, so they monitor their social media constantly. Some researchers also note the social introversion characteristic of «digital people.» Although the «Zetas» communicate freely with each other on social networks, they are very close in real life. Sherry Postnick - Goodwin-renowned child psychologist - in her article «Generation Z: A New Cohort Comes of Age» (Generation Z: a new cohort comes of age) «agent.» Most say they spend time with online friends rather than real people. Many students are reluctant to talk in class due to insecurity and fear of misunderstanding, so they seek a «safe space.»

To this possibility can be added the anonymous nature of the network; many teenagers feel comfortable with their invented and idealized character - a «virtual persona.»

The scientific paradigm considers three possible types of virtual personality: «corresponding (corresponds to reality), inconsistent (has both real and imaginary characteristics), imaginary (has nothing to do with reality).» It should be noted that the last two types of personality are much more common than the first due to the Internet environment's ability to hide personal data, remain inaccessible to aggressive users, and therefore feel impunity and act incompetently on others.

While researcher classifications continue expanding from additional influential factors, constructive internet-based socialization requires information literacy regarding modern media spaces, functions, roles, and manipulation techniques. Without proper skills, destructive online socialization risks intensify, particularly among impressionable teenagers still actively developing self-concepts.

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