



DOI 10.31261/IJREL.2024.10.1.04


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Formation of Socially Successful Personality of Adolescent Pupils by Means of Gamification (Kyiv City, Ukraine)

Abstract

The research highlights the essence of gamification and the results of teenagers' participation in the educational program with the elements of gamification called "Social successfulness" in the educational process of educational institutions. Theoretical methods are applied – analysis, synthesis, comparison, systematization, generalization of materials from psychological and pedagogical sources regarding the problem of social successfulness and the possibilities of its formation in adolescents in the conditions of out-of-school and general secondary education institutions, specification for harmonizing the content of the curriculum devoted

to “Social successfulness”; empirical methods – observation, questionnaires for collecting empirical information, blitz surveys concerning the awareness of the characteristics of a successful personality.

The authors consider gamification as a set of various tools and mechanics that contribute to the significant enrichment of the educational process with entertaining, educational, motivational, and social-communicative components. The researchers characterized the educational program “Social successfulness”, in particular, determined its target orientations and key competencies of teenagers, highlighted the gamification tools necessary for the implementation of the program, found out that the mixed format is the optimal format for its implementation, as it combines the advantages of offline and online learning and can be effective in conditions of increased danger associated with martial law.

The article carried out a pedagogical reflection and found out that, according to the results of the blitz survey, teenagers verbalize the two most common portraits of a socially successful personality (based on external indicators of success and personal qualities). According to the results of the questionnaire, it was found out that the participation of teenagers in the “Social Successfulness” program contributes to their positive and optimistic attitude towards themselves and their life prospects; growing interest in socially significant team activities; enhances pleasant experiences of success from achieving set tasks.

The issue of using gamification tools for children of different ages, including those with special educational needs, and the creation of an algorithm for using gamification elements in various educational institutions require further research.

K e y w o r d s: success, social successfulness, game elements, gamification tools, adolescent competencies, mixed learning

Research problem

Globalization and civilizational changes in the modern world are accompanied by increasing demands for the intensity of life, the speed of information dissemination and its accuracy. Changing traditional behavior patterns and algorithms requires a person to adapt to changing social reality, as well as the ability to use the latest information technologies. The dynamics of the development of social life imposes strict requirements for the formation of a teenager’s personality. It is them, on the threshold of adulthood, who must possess those social and personal qualities that will allow them to navigate in the field of uncertainty and construct social reality (being competitive, creative with a variable way of thinking, socially active and socially competent, flexible and at the same time responsible for their own life

trajectory). In this case, a growing individual will be able to reveal their potential, realize themselves, gain social recognition, and become socially successful.

Social success is one of the most important values of an individual. In this regard, researcher A. Yarema notes that “we can speak with confidence about the formation of the ideology of social success in modern society and the establishment of the doctrine of social success in the public consciousness. Orientation to achieve success in various spheres of life, the desire to meet social standards of success, demonstration of symbols of social success become factors that determine the behavior of social agents and significantly influence the structuring of social space” (Yarema, 2010, p. 92). Agreeing with this scientific position, we note that the aspiration of a growing individual to such external aspects of social successfulness as a high status in society and material well-being must necessarily be complemented by the development of important components of socialization – moral responsibility, ethical attitude towards others, readiness for productive interaction with representatives of different age and social groups. According to the American scientist B. Cantwell, the pupil’s success should not only be their personal responsibility, but should become the responsibility of the entire educational system (Cantwell, 2018, p. 10).

Note that today’s teenagers, as children of the digital age, are focused on the constant use of gadgets and related information and communication technologies. That is why Ukrainian researchers consider a teenager as an active participant in such activities that would “influence the development of his interests, encourage them to construct social relationships, the material and spiritual world on the basis of his own ideal of the future. This is possible only if such activity is creative, shared with peers and approved by adolescent groups” (Bedlinskyi & Bedlinskyi, 2011, p. 23–24).

The integration of a teenager into the system of modern social relations, them obtaining a positive experience of social success and the adaptation of the educational process to their needs are facilitated by modern means of education and upbringing, in particular, information and communication technologies. The content analysis of modern scientific sources (Antonov, 2022; Dichev & Dicheva, 2017; Lam & Tse, 2022; Oliveira et al., 2023; Pathak et al., 2021; Sahan, 2022; Smiderle et al., 2020; Taspinar et al., 2016) testified that the effectiveness of forming a socially successful adolescent personality is ensured by gamification, that is, the application of game principles and game elements in the practice of general secondary and out-of-school education institutions.

The focus of the research is to highlight the essence of gamification in the context of the formation of a socially successful personality of a teenager and the results of the approbation of the educational program with elements of gamification called “Social successfulness” in the educational process of educational institutions.

Research methodology

General prerequisites of the research

Throughout human history, games have always been used not only for entertainment purposes, but also for educational purposes. This is due to the motivational content and the simultaneous educational and therapeutic impact of the game: “aiming at self-affirmation, humorous coloring, the desire to play” (Voitsiakh, 2015, p. 54) are combined in it with the performance of important tasks of personality upbringing. The game contributes to the formation of the ability to self-knowledge (awareness of one’s own impressions, reactions, prejudices, stereotypes), the development of the ability to analyze both the motives of other people’s behavior and one’s own, to constructively resolve conflict situations. The game opens up opportunities to overcome psychological barriers much easier on the way to building harmonious relationships with others.

The very term “gamification” “originated in the digital media industry and was first used in 2002 by the developer of popular video games, N. Peling, who opened a consulting company to create game interfaces for electronic devices” (Sahan, 2022, p. 100). Gamification has been widely recognized since 2010, when it began to be implemented in various spheres of life. Foreign scientists emphasize that today there is no single generally accepted approach to understanding gamification: “gamification” is a heavily contested term, especially within the game industry and the game studies community. Discontent with current implementations, oversimplifications, and interpretations have led some to coin different terms for their own arguably highly related practice. For instance, designer and researcher Jane McGonigal redefined “Alternate Reality Games” as “a game you play in your real life”... “to describe her work, and game scholar and designer Ian Bogost recommended replacing the term “gamification” with “exploitationware” as an act of linguistic politics that would more truthfully portray the “villainous reign of abuse” that “gamification” presumably entails” (Deterding et al., 2011).

Such a loose interpretation of this term is connected, first, with the significant expansion of the field of gamification in recent years, the introduction of gamified tools both in the field of recreation and education for children and adults, and in the development of various services. As American and Bulgarian researchers emphasize: “In recent years gamification has seen rapid adoption in many initiatives. This is driven by its potential to shape users’ behavior in a desirable direction” (Dicheva et al., 2015).

We agree with the scientific position of the scientist L. Serhiieva regarding the effectiveness of gamification in various fields of human activity: “gameplay (the game process of a computer game from the player’s point of view) cannot contribute to the country’s gross domestic product, but (...) games affect the quality

of our life, creating positive emotions (optimism and curiosity) and strong social relationships (...) Gamers who prefer hard, complex games learn quick decision-making and stress resistance, as well as awareness of the consequences of the player's actions – mistakes are not repeated, successful strategies are applied again” (Serhieieva, 2014). We consider it worth noting that with the help of gamification, a certain process or object becomes so attractive that a person retains interest in it for a long time.

The trend of gamification in education is closely related to the concept of interactivity, which promotes dialogue, motivation for self-development and, above all, the active involvement of the pupil in the educational process. For example, the educational game based on poker “Minecraft” in schools in Sweden helps education seekers master the basics of engineering and construction art, the game “Lumosity” acts as a virtual “trainer” that activates the mental activity of pupils. Infographics (a combination of text and graphics) are also becoming more widespread, which helps to understand the educational material more deeply, strengthen its visual perception, and empathically involve the pupil in solving the problem under research.

That is why American scientists consider gamification a new educational theory and emphasize that “gamification is a product of an overlooked history of pedagogic refinement, a history of training that is effective, but largely ignored, namely the process of games teaching players how to play” (Dichev & Dicheva, 2017). The scientific conclusions of Ukrainian scientists are unanimous, who consider the gamification of education “a natural consequence of development associated with the use of technology in everyday life and the encouragement of the activity of the younger generation, which adequately understands the game and responds positively to its mechanisms. The main goal of gamified learning is the acquisition and application of knowledge, not the usual passing of a stage or getting a good grade” (Mykhaylova et al., 2023). At the same time, using gamification for educational purposes, according to Algerian researchers, “is essential to choose the right combination of game elements that perfectly matches the desired behavior change” (Khaldi et al., 2023).

In our opinion, in the educational process, gamification is a set of various tools and mechanics that contribute to its significant enrichment with entertaining, educational, motivational, and social-communicative components.

Research questions

1. Should a special educational program with elements of gamification be aimed at forming competencies of a teenager's personality, and in what organizational format will its implementation be optimal?

2. Does the educational program “Social successfulness” with elements of gamification contribute to the effectiveness of forming a socially successful personality of a teenager and in what way?

Research hypothesis

The hypothesis of the research is the assumption of the necessity to introduce special programs for teenagers with elements of gamification as an innovative and effective means of forming their socially successful personality.

The methodological basis of the research

The research is based on the principles of personally oriented, competence-based and activity-based approaches to education, upbringing, development and socialization of teenagers. The use of these approaches has a positive effect on the optimization of teenagers’ education, their readiness for professional self-determination, and intellectual, emotional and spiritual maturity, openness to self-development in crisis conditions. The identified approaches contribute to the implementation of the leading principles of humanistic education (child-centeredness, social hardening, cooperation, reliance on the subjective experience of pupils) as guiding principles for the formation of a socially successful adolescent personality.

The main components of forming the social success of a teenager’s personality are defined as cognitive, emotional-motivational, and activity-practical. At the same time, the level of formation of the emotional and motivational component is of key importance in adolescence. In the context of the research topic, the main indicators of the formation of such a component will be a positive-optimistic attitude towards oneself and one’s life prospects; interest in team socially significant activities; a pleasant experience of success from the achievement of set tasks. The level of formation of the indicator is determined using the following distribution: level A – 1–4 points – low; level B – 5–6 points – reduced; level C – 7–8 points – average; level D – 9–10 points – advanced.

Research instrument and procedure

The following methods were used in the research process: theoretical – analysis, synthesis, comparison, systematization, generalization of materials from psychological and pedagogical sources regarding the problem of social successfulness and the possibilities of its formation among teenagers in the conditions of

out-of-school and general secondary education institutions; concretization – to agree the content of the educational program “Social successfulness” and the process of its approval; empirical – observation of teenagers during classes in the “Social successfulness” educational program, surveys (questionnaires) to collect empirical information, blitz surveys concerning awareness of the characteristics of a successful personality.

The research took place during the 2022/2023 academic year based on the Center for out-of-school work “Northern Lights” in the Svyatoshyn district of Kyiv. 214 teenagers from the number of pupils of grades 7–9 were involved in the research. The diagnostic tool of the survey was the questionnaire for teenagers called “My participation in the program Social successfulness”. Among the interviewed teenagers, 59.1% are boys, 40.9% are girls. 15.2% of teenagers live in a village, 22.2% in an urban-type settlement, 25.3% in a small town, and 37.4% in a big city.

The questionnaire for teenagers called “My participation in the program Social successfulness” was a diagnostic tool for surveying teenagers to assess the effectiveness of the “Social successfulness” training program for the formation of social success of an individual. Assessment according to such a questionnaire was carried out before and after the implementation of the specified educational program. This article presents the results of a survey of teenagers on only one part of the questionnaire – “Emotional and motivational component of social successfulness”. Such a section contains five questions: 1. Rate your own positive and optimistic attitude towards yourself and your life prospects on a 10-point scale. 2. Which elements of gamification cause you the most positive and optimistic emotions? 3. Rate on a 10-point scale your own interest in team socially significant activities. 4. Rate on a 10-point scale the presence of your own pleasant experiences of success from achieving the set tasks. 5. Why do gamification elements promote successfulness?

Analysis of research data

The advantages of gamification as an innovative means of forming a socially successful personality of a teenager.

The formation of a socially successful personality of a teenager is a long and complex creative process aimed at their active life position, productive social activity, the desire for knowledge and the desire to influence social processes, the development of qualities necessary for social success – purposefulness, assertiveness, initiative, tolerance, attentiveness, diligence, cleverness, mobility, etc. Gamification helps to modernize this process and involve a teenager in it.

In this regard, Chinese scientists note that “attractive game aesthetic or badges and points are welcomed, though not necessary, features of an engaging gamified

lesson. Rather, with some good planning and design on teachers' part, effective gamification can be applied to everyday teaching with remarkable results" (Lam & Tse, 2022). Researchers in India share the same opinion: "Game based learning has gained importance recently. Because of its playful nature, it is able to motivate and attract students. Explaining the concept through games is a technique to make students learn better. Students have wide experience with respect to master, understanding, enjoyment and motivation" (Pathak et al., 2021, p. 2154).

Ukrainian scientists dwell in more detail on the potential of gamification: "The gamification tool provides an opportunity to learn in an active way, which, unlike the traditional, passive study of material, creates an emotionally comfortable environment for acquiring new knowledge and skills and facilitates the assimilation of new material. Its toolkit is a kind of technology for manipulating the pupil's behavior, an attempt to encourage them to study without coercion, through interest (...). A wide range of game gameplay provides an opportunity to choose the appropriate tools for each pupil, with a different psychotype, with a different level of motivation and goals, to interest in the educational process and to teach teamwork" (Zholubak & Mechus, 2020, p. 218–219).

The elements of gamification make it possible to make fun (feeling of satisfaction) synonymous of the learning. For example, Hard Fun: accept a challenge, overcome difficulties, solve problems; Easy Fun: explore new worlds with interesting characters, participate in the discussion; Serious Fun: to combine the pleasant with the useful, creating new educational content; People Fun: cooperation, collaboration, communication, etc. Thus, a teenager can acquire knowledge and competences while playing.

The implementation of gamification creates conditions for achieving high results in education and self-realization of teenagers, in particular, by using the following techniques in the educational process:

- focus attention on the key idea of the material;
- to structure information, presenting it "in portions" according to the principle of "small content block – rest" for better mastery of new educational material;
- use constant repetition to strengthen knowledge, encourage innate curiosity and desire for knowledge;
- draw attention to the discussed problem with emotionally meaningful visual stimuli (interesting, graphically presented facts, telling examples, jokes related to the topic);
- use the possibilities of a multi-sensory environment (animation, videos, scribing, various devices), etc.

Therefore, gamification significantly contributes to the formation of various competencies of pupils. With its assistance, teenagers learn to: plan their work; argue their own judgments; make a decision; assign roles, interact; analyze and present the results; evaluate your actions and the actions of your game partners, put yourself in another person's place. That is why one of the signs of a successful

environment in a modern educational institution is the presence of a cloud-oriented educational environment that takes into account the needs of teenagers and the peculiarities of their use of various gamified mechanisms.

Characteristics of the educational program with elements of gamification called "Social successfulness".

The purpose of the educational program with elements of gamification called "Social successfulness" (hereinafter – the Program) (the author – a Ukrainian researcher, K. Bezruk) is a comprehensive program and methodical support for the formation of a socially successful personality of a teenager in an out-of-school education institution. Its target orientations are defined as the formation and development of soft skills in education seekers, which allow them to be successful regardless of the specifics of the activity or the direction that the education seeker of education chooses; formation of the mindset of a successful personality in teenagers, motivation to achieve success.

The program is based on the principles of close interaction between the educational institution and stakeholders in the formation of a socially successful adolescent personality and promotes the formation of the following competencies in pupils:

- *cognitive* – provides awareness of the value basis of one's own life activity and becomes a system-forming focus for the development of social cohesion, initiative, responsibility and other components of social success;
- *social* – promotes the development of ideas about oneself as a bearer of certain social roles, skills of effective cooperation, responsibility for the results of joint activities, the ability to be an active member of society;
- *information* – stimulates the development of skills to effectively operate with information (search, collection, analysis, evaluation and use of information, obtaining new knowledge), the ability to navigate in the flow of diverse, contradictory information (distinguish between reliable and unreliable information);
- *life-creating* – promotes the development of self-analysis skills, self-control, self-upbringing, self-education, self-learning, life planning, the ability to identify, search for, acquire and apply resources necessary for the realization of life goals;
- *practical* – promotes the development of self-management skills, goal setting, planning teamwork for results, constructive behavior in conflict situations, increasing self-esteem and self-confidence, critical thinking and creative problem solving;
- *communicative leadership* – provides knowledge exchange, dialogue development, understanding of goals and objectives, involvement in decision-making, performance evaluation and feedback;
- *legal* – promotes the development of the ability to protect and realize one's rights and freedoms, the fulfillment of universal and civic duties;

- *competences to longlife learning* – forms the ability to reason, compare, generalize, observe, independently search for information from various sources, acquire individual experience of self-organization, educational reflection, and self-study skills.

The scope of the Program is calculated for 1 year of study at the basic level, i.e. 144 hours per year. A feature of the Program is that, depending on how quickly and qualitatively pupils acquire practical skills, the head of the group can change the number of theoretical and practical classes within the specified hours (Bezruk, 2022).

The program is addressed to a wide range of users: teachers of out-of-school and general secondary education institutions, social pedagogues and psychologists.

Research results

Approbation of the Program took place during the 2022/2023 academic year based on the Center for Out-of-School Work “Northern Lights” in the Svyatoshyn district of Kyiv. The classes were held twice a week for two study hours in each group. Spatially, each group was allocated a separate room for classes, where it was possible to store the developed artifacts and products of the participants’ creativity until the very end of the training. The room was equipped with the tools necessary for training: interactive whiteboards, flip charts, markers, colored and white paper, etc. According to the agreement, the participants had to bring their own devices to the class, because according to the Program, it was supposed to actively use the “Bring your own devices” (BYOD) method and gamification tools.

The reinterpretation of previous scientific research and the reflection of observations of the educational process proved that in modern conditions the program “Social successfulness” can be implemented in three organizational formats. Their comparative analysis made it possible to choose a mixed format for approval (figure 1).

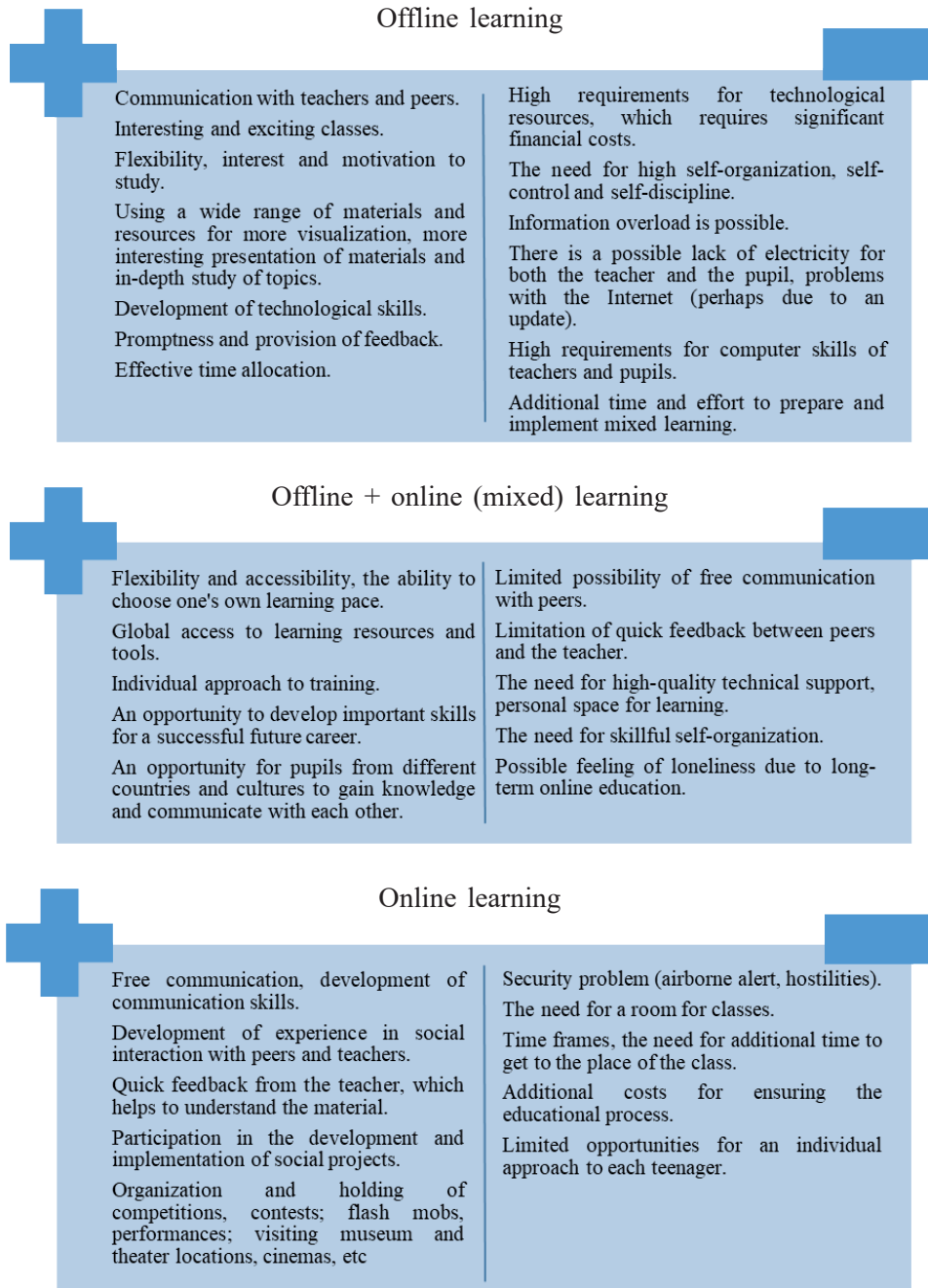


Figure 1. Possible transmitting formats of the “Social successfulness” program: comparative characteristics

Source: Own work

During the approbation and implementation of the Program, various gamification tools were used:

1. *Creation of a thematic promotional video.* Promotional video with a motivational mini-video “To success on your own wings!” presented the target orientations and features of the “Social Successfulness” program, emphasized its strengths for adolescent development, invited participation and outlined potential benefits from mastering the Program. The advertisement clip was distributed among pupils, parents, teachers or other interested persons, was placed on platforms or channels that are available for viewing by the target audience of the Program (YouTube; Facebook; Instagram; Telegram, Viber, WhatsApp; Microsoft Teams). As an option, the teacher-trainer could post a thematic stream on the above-mentioned platforms or channels. The widest possible coverage was welcomed.
2. *Visualization of interaction rules.* The Canva online resource was chosen for use, which allows you to create designs and animations for social networks, presentations and websites; provides opportunities to select animation templates and customize them to your needs; has a simple and clear interface. It is also recommended to use such a tool as a “word cloud” (a visual representation of key words in the text – the frequency of use of the word is displayed using the font size or its weight). This tool can be created in several ways. The first is involving pupils using Google Forms or the Mentimeter resource. The second is the creation of a “word cloud” without pupils’ suggestions, only to visualize the previously worked out results. Interactive tools such as WordArt or TagCrowd were used to create a “word cloud”.
3. *Visualization of successful narratives.* An example can be the creation of a digital museum called “Pantheon of successful personalities” (success stories of famous personalities). To implement this task, the participants were offered to use such ideas as: a virtual exhibition hall; multimedia presentation (in PowerPoint or Google Slides); a didactic game in them teenagers answer questions, solve puzzles and explore the life stories of celebrities (Kahoot!, Genially, LearningApps.org, Scratch, Flippity platforms); a comic or animation about stories of successfully overcoming personal or social problems (Pixton, ToonDoo, Powtoon, Scratch, Animaker resources); video stories – pupils create short videos about the achievements of famous successful personalities (online tools: Clipchamp, WeVideo, Animoto).
4. *Using mind maps* as part of a narrative or as a way of visualizing stories. Working with mind maps does not require complex resources or programs (Coggle, MindMup, Canva, Lucidchart, Draw.io platforms), which allows you to add elements – nodes, links and text blocks, edit text and colors.
5. *Chat or forum discussions of the progress and results of joint activities.* It is important to create a friendly and open environment for discussions, where teenagers can communicate, process and analyze acquired knowledge,

exchange information, ideas and news. For this, you should choose a common platform: Telegram, Viber, WhatsApp, Facebook Groups, Slack, Microsoft Teams, etc. During the creation and operation of the group, it is important to observe privacy, confidentiality and take care of the protection of personal data. To maintain the activity of the group, it is necessary to: ask interesting questions, raise relevant topics for discussion, share useful information and resources, and add photos, videos, links and other multimedia elements for more interesting and meaningful discussions.

6. *Use of means of stimulation and competitiveness* (obtaining premium points, badges, statuses, certificates). An effective element of motivation for active and interested participation is receiving bonus points for completing tasks. It is important that teenagers understand exactly what they are doing: speed, clarity, creativity, meaningful actions, etc. The Kahoot! platform was used to stimulate teenagers' activity and increase their sense of competitiveness, which provides an opportunity to view and analyze the result after completing a mug or quiz.

To carry out a pedagogical reflection of the educational results of the participants, a blitz survey was conducted (teenagers answered the question: "What does it mean for me to be socially successful?"). For example: "This is a person who knows how to work on their own development", "(...) has the flexibility to fulfill social roles", "(...) is aware of the importance of leadership for successful life activities", "(...) is ready to make decisions and bear responsibility for them", "(...) strives to self-organization, self-movement, self-development", "(...) demonstrates creativity, constructive activity, reflexivity", "... is able to achieve planned results", "(...) is able to win well-deserved recognition", "(...) is able to achieve personal and social well-being", "(...) ignites others with their example for victories". According to the data obtained, teenagers verbalize the two most common portraits of a socially successful person: the first is built based on external, socially recognized indicators of success; the second – personal qualities that reflect people's views on successful activities.

Analysis of respondents' answers to the statement "Rate on a 10-point scale your own positive and optimistic attitude towards yourself and your life prospects?" given in table 1.

Table 1.

Attitude level	Before participation in the Program	After participation in the Program	Dynamics (+/-)	p
<i>Low</i>	31 (14,5%)	18 (8,5%)	- 6%	p<0,05
<i>Reduced</i>	94 (43,9%)	58 (27,1%)	- 16,8%	
<i>Average</i>	68 (31,8%)	106 (49,5%)	+ 17,7%	
<i>Increased</i>	21 (9,8%)	32 (14,9%)	+ 5,1%	

According to the Pearson χ^2 test, the distribution of responses in general has a probable difference $\chi^2=22.56$, the critical value $\chi^2=7.82$.

According to the results of teenagers' answers to the question "Which elements of gamification bring about the most positive and optimistic emotions?" it was found that more than three quarters of the respondents had a positive perception of game tools.

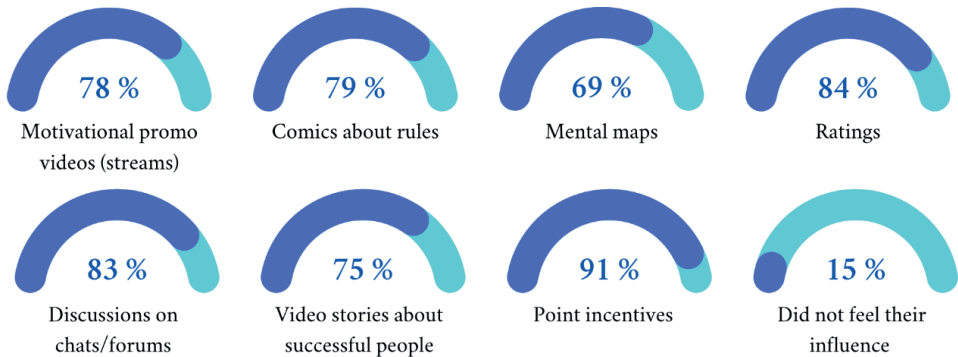


Figure 2. Which elements of gamification bring about the most positive and optimistic emotions?

Source: Own work

Most of all, teenagers liked "score incentives" (91%), "ratings" (84%) and "discussions on chats/forums" (83%), which can be explained by the correspondence to the leading types of age-related activities of teenagers – communication and competition.

The results of respondents' answers to the statement "Estimate on a 10-point scale your own interest in team socially significant activities" are presented in table 2.

Table 2.

Attitude level	Before participation in the Program	After participation in the Program	Dynamics (+/-)	p
Low	24 (4,2%)	12 (5,6%)	- 1,4%	p<0,05
Reduced	61 (28,5%)	34 (15,9%)	- 12,6%	
Average	81 (37,9%)	121 (56,5%)	+ 18,6%	
Increased	39 (18,2%)	47 (21,9%)	+ 3,7%	

According to Pearson's χ^2 test, the distribution of responses in general has a probable difference of $\chi^2=20.16$, a critical value of $\chi^2=7.82$.

The answers to the statement “Estimate on a 10-point scale the presence of your own pleasant experiences of success from achieving the tasks” are presented in table 3.

Table 3.

Attitude level	Before participation in the Program	After participation in the Program	Dynamics (+/-)	p
<i>Low</i>	13 (6,1%)	7 (3,3%)	- 2,8%	p<0,05
<i>Reduced</i>	41 (19,2%)	11 (5,1%)	- 14,1%	
<i>Average</i>	108 (50,5%)	131 (61,2%)	+ 10,7%	
<i>Increased</i>	52 (24,2%)	65 (30,4%)	+ 6,2%	

According to Pearson’s χ^2 test, the distribution of responses in general has a probable difference of $\chi^2=22.77$, a critical value of $\chi^2=7.82$.

Answers to the question “What do game elements of learning work for?” were distributed as follows (figure 3):

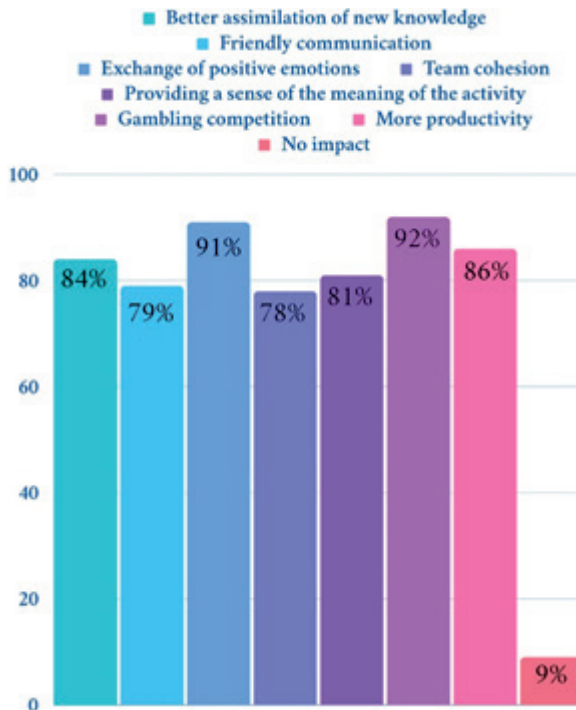


Figure 3. What do game elements of learning work for?

Source: Own work

It is noteworthy that after the implementation of the Program, the first two positions were occupied by “gambling competitiveness” (92%) and “exchange of positive emotions” (91%), and the third place was “better assimilation of new knowledge” (89%).

Discussions

We share the scientific position of American and Bulgarian researchers (Dicheva et al., 2015) that the effective implementation of gamification requires the presence of a certain type of environment that supports the inclusion of selected game mechanics and has the necessary technological resources. Thus, we agree with scientists that gamification has a powerful potential for solving various educational tasks, “if it is well designed and used correctly. Therefore, more substantial empirical research is needed to investigate, in particular, the motivating effects of using single game elements in specific educational contexts and for particular types of learners. This would inform instructors who are interested in gamifying their courses and help them in deciding what game elements to use in their specific context” (Dicheva et al., 2015).

According to the research by Brazilian scientists who used game elements in teaching programming, a gamified environment is more conducive to positive changes in the behavior of participants and improving their educational results, compared to a non-gamified environment: “The results showed a change in the behavior of the gamified group showing a significant improvement in the accuracy of students with personality traits with low agreeableness, low openness, and introverts who used the gamified version” (Smiderle et al., 2020). We reached similar scientific conclusions during the approbation of the “Social Successfulness” training program: gamification helps teenagers gain responsibility and self-confidence, feel their importance to others, adequately perceive others, realize their own advantages and disadvantages, and promotes a constructive attitude to reality.

Conclusions

Thus, gamification expands the possibilities of working with information and increases motivation for social success; creates favorable conditions for discussing various difficult life situations; encourages independent choice of life position

and ways of achieving social success; helps the adaptation of the teenager in the environment of peers, their successful socialization.

The educational program with elements of gamification called “Social successfulness” contributes to the formation of a socially successful personality of a teenager. A mixed format has been identified as the optimal format for implementing this program, as it combines the advantages of offline and online learning and can be effective in the heightened threat associated with martial law. It has been experimentally determined that the participation of teenagers in the “Social Successfulness” program contributes to their positive and optimistic attitude towards themselves and their life prospects; growing interest in socially significant team activities; enhances the pleasant experience of success from achieving set tasks (probability is verified using the Pearson χ^2 test). Teenagers believe that the elements of gamification of learning contribute to friendly communication, exchange of positive emotions, better assimilation of new knowledge, team cohesion, greater work productivity, gambling competitiveness, ensuring a sense of the meaning of activity.

The introduction of gamification tools into the practice of forming a socially successful personality of a teenager allows to make the educational process modern, interesting and useful for pupils.

The issue of using gamification tools for children of different ages, including those with special educational needs, and the creation of an algorithm for using gamification elements in various educational institutions require further research.

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Kształtowanie społecznie skutecznej osobowości dorastającego ucznia za pomocą grywalizacji (Kijów, Ukraina)

Streszczenie

Badanie podkreśla istotę grywalizacji i testowania programu nauczania z elementami grywalizacji pt. «Sukces społeczny» w instytucjonalnym procesie edukacyjnym. Zastosowane metody teoretyczne to analiza, synteza, porównanie, systematyzacja, uogólnienie źródeł psychologicznych i pedagogicznych dotyczących problemu sukcesu społecznego i możliwości jego kształtowania u młodzieży w pozaszkolnym i ogólnokształcącym szkolnictwie średnim, specyfikacja w celu koordynacji treści programu nauczania pt. «Sukces społeczny» i procesu jego testowania; metody empiryczne – obserwacja, kwestionariusze w celu zebrania informacji empirycznych, ankiety błyskawiczne dotyczące świadomości cech osobowości odnoszącej sukcesy, testowanie programu i ocena wyników.

Badacze opisują program nauczania «Sukces społeczny», w szczególności określają jego docelowe kierunki i kluczowe kompetencje nastolatków, podkreślają narzędzia grywalizacji niezbędne do wdrożenia programu i dowiadują się, że format mieszany jest optymalnym formatem do jego wdrożenia, ponieważ łączy w sobie zalety uczenia się offline i online i może być skuteczny w warunkach zwiększonego zagrożenia związanego ze stanem wojennym.

W artykule przeprowadzono refleksję pedagogiczną i stwierdzono, że zgodnie z wynikami ankiety błyskawicznej młodzież werbalizuje dwa najczęstsze portrety osobowości odnoszącej sukcesy społeczne (w oparciu o zewnętrzne wskaźniki sukcesu i cechy osobiste); zgodnie z wynikami ankiety zdecydowana większość respondentów pozytywnie postrzegала narzędzia do gier i uznawała własne działania za produktywne podczas nauki opartej na grywalizacji. Potrzebne są dalsze badania nad wykorzystaniem narzędzi grywalizacyjnych dla dzieci w różnym wieku, w tym ze specjalnymi potrzebami edukacyjnymi, oraz nad stworzeniem algorytmu wykorzystania elementów grywalizacji w różnych instytucjach edukacyjnych.

S ł o w a k l u c z o w e: sukces, sukces społeczny, elementy gier, narzędzia grywalizacji, kompetencje nastolatków, blended learning

Formación de la Personalidad Socialmente Exitosa del Estudiante Adolescente a través de la Gamificación (Ciudad de Kiev, Ucrania)

Resumen

Este estudio destaca la esencia de la gamificación y la implementación de un programa educativo con elementos de gamificación llamado «Éxito Social» en el proceso educativo de las instituciones educativas. Se utilizaron métodos teóricos como el análisis, síntesis, comparación, sistematización y generalización de materiales de fuentes psicopedagógicas en relación al problema del éxito social y las posibilidades de su formación en adolescentes en escuelas secundarias y extraescolares, así como la especificación para coordinar el contenido del programa educativo «Éxito Social» y su proceso de

prueba; los métodos empíricos incluyen observación, encuestas para recopilar información empírica, encuestas rápidas sobre la comprensión de las características de la persona exitosa, la prueba del programa y la evaluación de los resultados por los encuestados.

Las autoras consideran la gamificación como un conjunto de diversas herramientas y mecánicas que enriquecen significativamente el proceso educativo con componentes de entretenimiento, educación, educación en valores, motivación y comunicación social. Las investigadoras describen el programa educativo «Éxito Social», en particular, identifican sus objetivos y competencias clave para los adolescentes, destacan las herramientas de gamificación necesarias para implementar el programa, determinan que el formato mixto es el formato óptimo para su implementación, ya que combina las ventajas del aprendizaje presencial y en línea y puede ser efectivo en condiciones de riesgo elevado, como una situación de guerra.

En el artículo se realiza una reflexión pedagógica y se aclara que, según los resultados de la encuesta rápida, los adolescentes verbalizan dos retratos más comunes de una persona socialmente exitosa (basados en indicadores externos de éxito y cualidades personales), y de acuerdo con los resultados de las encuestas, la mayoría de los encuestados perciben positivamente las herramientas de juego y consideran su propia actividad durante el aprendizaje con gamificación como productiva. Las cuestiones relacionadas con el uso de herramientas de gamificación para niños de diferentes edades, incluidos aquellos con necesidades educativas especiales, y la creación de un algoritmo para utilizar elementos de gamificación en diferentes instituciones educativas, requieren una investigación adicional.

Palabras clave: éxito, éxito social, elementos de juego, herramientas de gamificación, competencias de los adolescentes, aprendizaje mixto

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Формирование Социально Успешной Личности Учащегося Подросткового Возраста Средствами Геймификации (г. Киев, Украина)

Аннотация

В исследовании отражена сущность геймификации и апробация учебной программы с элементами геймификации «Социальная успешность» в образовательном процессе учебных заведений. Применены теоретические методы – анализ, синтез, сравнение, систематизация, обобщение материалов психолого-педагогических источников относительно проблемы социальной успешности и возможностей её формирования у подростков в условиях заведений внешкольного и общего среднего образования, конкретизация для согласования содержания учебной программы «Социальная успешность» и процесса её апробации; эмпирические методы – наблюдение, анкетирование для сбора эмпирической информации, блиц-опросы для осознания характеристик успешной личности, апробация программы и оценивание результатов её влияния респондентами.

Авторы рассматривают геймификацию как совокупность разнообразных инструментов и механик, которые способствуют существенному обогащению образовательного процесса развлекательной, учебной, воспитательной, мотивационной и социально-коммуникативной составляющими. Исследовательницами охарактеризована учебная программа «Социальная успешность», в частности, определены её целевые ориентиры и ключевые компетентности подростков, освещены необходимые для внедрения программы инструменты геймификации,

выяснено, что смешанный формат является оптимальным форматом её реализации, поскольку он сочетает преимущества офлайн и онлайн обучения и может быть эффективным в условиях повышенной опасности, связанной с военным положением.

В статье осуществлена педагогическая рефлексия и выяснено, что, согласно результатам блиц-опроса, подростки вербализуют два наиболее распространённых портрета социально успешной личности (на основе внешних показателей успеха и личностных качеств), по результатам анкетирования, подавляющее количество респондентов положительно восприняло игровые инструменты и признало продуктивной свою деятельность во время обучения с применением геймификации. Дальнейшего изучения требуют вопросы использования инструментов геймификации для детей всех возрастов, в том числе, с особыми образовательными потребностями и создания алгоритма использования элементов геймификации в различных учебных заведениях.

К л ю ч е в ы е с л о в а: успех, социальная успешность, игровые элементы, инструменты геймификации, компетентности подростков, смешанное обучение

