

PARENTS' VIEWS OVER THE USE OF DIGITAL GAMES IN PRIMARY CLASSROOMS

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Abstract

Today, students are really influenced by the digital age. Serious digital games improve the sense of responsibility, shape different skills and can help students achieve new knowledge. The students are already playing at home, and, as evidenced by this study, they use them on a daily basis. Digital games shape personality; gamers become adaptable, and they expect quick responses and feedback. Students' logical thinking, sense of creativity, problem solving, acting in various situations, and stress management are all improved by digital games. The most important thing, as revealed by the questionnaire, is that they are extremely happy when playing games.

This study investigates the opinions of parents about fun and educational digital games. The survey was conducted using a questionnaire adapted by the researcher from the literature and applied online. Participation was voluntary. The study is trying to show if parents are aware of the advantages and disadvantages of using didactic digital games in the classroom.

The results show that respondents know that their children use digital games at home and in the classroom. They mostly think of using them as a method or approach for learning, that will produce fresh information. Also, the results are offering a view over the digitalization of classrooms, gamification of lessons and the importance of parent-school communication.

Keywords: digital games, gamification, game-based learning, didactic games, primary school, school-family partnership

1. INTRODUCTION

The importance of strong family-school collaboration in ensuring high-quality education cannot be overstated. Who better to know their children than their parents? As a result, family involvement is critical to educational quality. The formation of a safe learning environment and the installation of fundamental acquisitions for pupils can be enriched by technology.

Families are the first educators of their children, and they continue to affect their children's learning and development during the school years and long after they have graduated from high school.

In these difficult times, the education system must be adaptable, as demonstrated by the coronavirus epidemic. A fresh approach in addition to the pre-assessment and innovative learning modalities is required. It is also critical to adopt a new perspective on the relationship between educational actors. In these crisis situations, it is crucial to have parents around as teachers. Teachers must understand family diversity, community resources, student experiences both in and out of school, and how to maximize student learning and achievement by utilizing all available resources. (Epstein, 2018)

The unity of action of all educational factors: school, family, and other educational institutions are one of the most significant criteria to improve the effectiveness of educational activity with students. (Qual form, 2022)

During the coronavirus outbreak, the school relocated to a virtual environment. As instructors, we had to come up with new ways to communicate and attract students' attention to what we were talking about during those school hours. We also needed to develop new assessment procedures that would ensure that students were not cheating and were truly learning. So, we came close to finding some research that discussed how beneficial digital games may be.

Future generations need to be inspired and educated, and families look to schools to lay the academic groundwork for their children's success. Schools must also emphasize the importance of the family in

education at the same time. Because of this, it is critical for families and schools to work together cooperatively. (Valkenburg & Piotrowski, 2018)

Games are the best learning environment because they give players freedom to fail. Games can promote original thinking and give them a sense of control. To increase engagement and inventiveness, game components might be added to conventional learning environments. Instead of providing text and multiple-choice questions on a never-ending stream of screens, with little feedback or assessment of knowledge, we need to use games in e-learning. Gamification is necessary in the classroom to prevent the never-ending barrage of information that we bombard students with during a dry lecture format. (Kapp, 2012)

TV, tablets, and smartphones must transform from babysitters into teaching resources. This can change the way that technology is perceived and show how, when used properly, digital learning games may improve the learner's creativity, reasoning, acceptance of failure, fear of failure, and problem-solving abilities, as new talents.

Digital games are apps that generate immersive, engaging learning experiences based on the traits of video and computer games in order to meet certain learning objectives. (Whitton, 2009) They are fun, and engaging; games are interesting, and suspenseful activities that can teach new things by discovering new experiences and unfamiliar realities, so the child remains engaged in that activity. Teachers want these things in their school activities.

Game-based learning is a method that engages and motivates primary-age students. Therefore, it is important that there is optimal communication between parents and teachers. Parents should be involved by using the knowledge they have about their child and the activities they undertake at home.

If parents know what type of games their children use at home, what engages them and what motivates them, they can work with the school to learn skills and techniques of intellectual work in the form of activities dedicated to games and gamification.

As a Chinese proverb says, there is time to fish and time to dry the turnips, now is the time that the Romanian public education system must adjust to the current situation from all perspectives, including economic and sociocultural. Gamification and digital didactic games bring a new web of connections that must be valued, which will lead to a rethinking and reorganization of the curriculum, as well as new approaches and the introduction of alternative teaching and evaluation methods.

According to Matera Michael, intentional gamification is the ideal vehicle to complement many teaching techniques. Classroom activities might be enhanced with the help of gamification and game-based learning. A completely dynamic, and productive classroom is one that has been built with the heart of rich material, the soul of the modern educational movement, and the spirit of collaboration and creativity. (Matera, 2015)

The new educational policy has established a variety of learning situations in which students can improve their knowledge, skills, attitudes, talents, and values using game-based learning and gamification. Parents must be involved in school activities because their opinion must be valued. They know their children best, and in order to have immersion, achievement, cooperation, competition, creativity, motivation and fun in class, we have to achieve a common goal and create a strong partnership.

The purpose of the present study is to investigate the opinion of parents about the use of games in primary education. The study focused on some basic questions that were developed in the questionnaire: What fun digital games are the primary school students playing at home? Are digital educational games used in their lessons? With what frequency are they valued in lessons? Do parents observe the advantages or disadvantages of fun or/and didactic digital games? What are they?

2. MATERIALS AND METHODS

Gamification, digital games and game-based learning are modernizing the school. At the international level there are new education policies, for example, the EU programs, as outlined through the numerous initiatives "Investing in Europe's Youth" and "New Skills Agenda for Europe," depends on the educational sector's capacity to develop a more digitalized educational model. It was demonstrated that efficient education and training systems are essential for a just and open society as well as long-term prosperity and employment. The European Commission has also emphasized the need to develop a new model of education in a communication titled "Action Plan for Digital Education (2021-2027)," where the emphasis will be on digitalization to forge contemporary forms of cooperation that guarantee competitiveness. (European Commission, 2020)

This important factor emphasizes how parents and families, who serve as their children's primary instructors, have a long-lasting impact on the attitudes and academic success of their offspring. They are in a position to support school objectives, policies, and culture as well as encourage their children's learning both inside and outside of the classroom. Parents expect schools to provide their children safe and nurturing environments. (Australian Government, 2022)

The main hypothesis from which this investigation started is that the use of digital educational games in the classroom will have beneficial effects on students by increasing their development of new skills and abilities.

Thus, the research approach and design were made to answer the following research questions:

- Is there a relationship between the use of digital educational games and the creation of new competences in the lives of students?
- What are the advantages and disadvantages of using digital educational games in the classroom?

Therefore, the main purpose of this study is the quantitative analysis of parents' opinions regarding the use of digital educational games in their children's classroom. It would be easier to introduce gamification and teaching based on digital teaching games knowing the opinions of parents and teachers. Through this study we aim to see what are the differences perceived by them between the computer games and those used for teaching purposes. This research also checks if there is an improvement in the students' school performances when digital educational games are used in the classroom.

Another objective of this work is to introduce the concept of gamification in the educational setting, to familiarize and use it in the classroom.

The research approach was structured in a main phase around the two research questions mentioned above. As a research method, we opted for the questionnaire survey distributed online among parents in pre-university education.

The instrument used was a questionnaire adapted by researchers after Eppmann et al. (2018). It was structured in two parts: 4 demographic items and 35 items related to the issue of games. The answers to the questions were given using the five-step Likert scale (1-strongly disagree, 5-strongly agree). Participation was voluntary. This questionnaire was applied online using Google forms. For the interpretation of the results, the answers of type 1 and 2, respectively, 4 and 5 were summed, the sums being interpreted as disagreement and agreement.

The study was optional to participate. 212 parents participated in the study. Women made up 97.6% of the responses. Individuals range in age from 18 to 65 years, and the majority of them fall into the age categories 35–39, 40–44, and 30–34 (25.5%, 24.5%, and respectively 19.8%). For the level of studies, up to 33 % of the respondents additionally hold a master's degree, bringing the total number of respondents with degrees to 42%. Furthermore, 77.3 % of the children of the respondents attend schools in the urban area.

3. RESULTS

3.1. Respondents' opinion about fun and didactic digital games

The respondents state that their children play (56.1% in agreement) daily on the phone or on the computer. Respondents also consider that those digital games with zombies, killing or war are a big waste of time for children (56% agreement). 67.5% of the respondents say that children play for their own pleasure and not to please others. They say that they all play the same games (46.7% agreement).

The 212 participants in the survey say that in class, there is the use of "those didactic games that are also fun" (52.3% agreement) as a learning tool / method (41% agreement). Also, when a new lesson is thought, about 53.7% state that the didactic game is used.

If we were to classify the responses received from parents regarding the use of the didactic game in the classroom, it would be used as follows: 67% agree that it highlights the content of learning; 66% say that students, respectively their children, learn better when the didactic game is used; while 61% state that the lessons achieve their objectives through it; 41% agree that the students learn using the didactic game, and only 32.5% say that it is used to teach new content in class. The frequency of use of digital educational games is as follows: once a month (9.9%); once a week (32.5%); several times a week (42.5%).

3.2. Respondents' opinion about advantages and disadvantages of fun and didactic digital games

The results obtained with reference to the advantages of the games are presented in Table 1. The analysis of the difference in the percentages of agreement for the answers to the items related to didactic digital games and those related to fun digital games put in evidence the following findings:

- 59.9% of the respondents say that the didactic game stimulates the children's imagination;
- 55.2% of the respondents believe that the didactic game stimulates students' creativity;
- 83.5% of the respondents claim that the logic of children is stimulated with the help of the didactic game;
- 81.1% of the respondents say that their children are happy when playing fun digital games;
- 54.2% of the respondents agree that children feel active when playing fun computer games;
- 86.8% of the respondents believe that by using didactic games in the classroom children learn something.

Items	N	Fun game	Didactic game	None
Digital games stimulate the imagination of students.	212	33%	59.9%	7.1%
Digital games stimulate creativity.	212	38.2%	55.2%	6.6%
Digital games stimulate students' logic.	212	12.3%	83.5%	4.2%
Digital games stimulate the adventurous spirit of children.	212	72.6%	21.2%	6.2%
Digital games require quick decisions.	212	40.6%	50.5%	9%
Digital games require quick reactions	212	57.5%	34.4%	8%
Digital games involve the use of a game strategy	212	49.1%	45.8%	5.1%
Digital games make students happy.	212	81.1%	12.3%	6.6%
Digital games make students feel active.	212	54.2%	38.7%	7.1%
Digital games allow students to explore various situations.	212	67%	29.2%	3.8%
Digital games make students feel autonomous.	212	46.7%	37.3%	16%
Digital games make students feel influential.	212	54.2%	23.10%	22.60%
Digital games that students like combine singular and team play.	212	51.4%	42%	6.6%

Digital games make students feel like they have learned something.	212	9%	86.8%	4.2%
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Table 1. The opinion of the respondents on the advantages of the digital games

Table 2 shows the disadvantages of digital games. The responses were classified as follows: 64,1% of the respondents agree that "Digital games are making students restless"; another 52.4% of the respondents agree that "Digital games sometimes make students feel frustrated, angry or hostile". There is 12.8% difference between the respondents who believe that digital games are perceived as boring for their children and those who do not agree with the statement. Parents are not convinced that digital didactic games are boring, but 34,4% are undecided about this assertion.

The 212 respondents have also answered all the questions about the disadvantages of digital educational games because they think that some games can be addictive, some violent, others can create health problems and children cannot always avoid cyberbullying. What they do not know is that these didactic games generally have strict rules and are played under the supervision of teachers, having educational content that meets the learning objectives.

Items	N	Disagree	Undecided	Agree
Didactic digital games are often perceived as boring by students.	212	39.2%	34.4%	26.4%
Quality digital games require superior computer performance and certain devices.	212	15.6%	33%	51.4%
Digital games available for free on the Internet are deficient in performance.	212	26%	38.7%	35.4%
The didactic digital games proposed in the textbooks and other resources are intended only as a learning tool.	212	8.5%	28.8%	62.8%
The didactic digital games proposed in the textbook or other sources are designed to integrate the new lesson.	212	7.5%	25.5%	67%
Digital games sometimes make students feel frustrated, angry or hostile.	212	18.9%	28.8%	52.4%
Digital games are making students restless.	212	13.2%	22.6%	64.1%

Table 2. The opinion of the respondents regarding the disadvantages of digital games

Equal percentages of respondents are undecided when it comes to the two statements "Digital games sometimes make students feel frustrated, angry or hostile" and "The didactic digital games proposed in textbooks and other resources are intended only as a learning tool." We still believe that the games are making students anxious and upset, and that the didactic digital games are only used as tools.

Educational games help children learn easier and better (66%). As advantages, respondents said that the use of digital educational games in the classroom stimulates children's creativity (59%). Creativity is stimulated in children to a greater extent (55.2%) than fun play (38.2%).

The digital educational game teaches students to think logically, but no other game makes children happier than the fun game (81.1%). Last but not least, the spirit of adventure is stimulated with the help of fun games (72.6%).

In a previous study (Teachers' opinion regarding the use of digital games in primary education) we asked primary school teachers largely the same questions. They said that they appreciated the use of digital learning games in the classroom. In addition, teachers find them useful and engaging for students during class. Parents believe that they are useful and that students actually learn when digital learning games are used. In Table 3 there is a comparison of responses about the didactic digital games (agree).

Items	Parents' responses (agreement)	Teachers' responses (agreement)
Digital games stimulate the imagination of students.	59.9%	77.17%
Digital games stimulate creativity.	55.2%	70.87%
Digital games stimulate students logic.	83.5%	81.89%
Digital games stimulate the adventurous spirit of children.	21.2%	38.56%
Digital games require quick decisions.	50.5%	74.80%
Digital games require quick reactions	34.4%	63.78%
Digital games involve the use of a game strategy	45.8%	66.93%
Digital games make students happy.	12.3%	56.69%
Digital games make students feel active	38.7%	73.23%
Digital games make students explore various situations.	29.2%	77.95%
Digital games make students feel autonomous.	37.3%	58.27%
Digital games make students feel influential.	23.10%	45.67%
Digital games that students like combine singular and team play.	42%	58.27%
Digital games make students feel they have learned something.	86.8%	76.38%

Table 3. Comparison on the responses regarding the advantages of digital didactic games

We can see that parents and teachers differ greatly in the opinions expressed in this questionnaire. Furthermore, parents are not so confident that didactic games are often used in the classroom and that they are incorporated as a method and as a tool to teach new lessons and acquire the necessary learning objectives. The results obtained show that the respondents, both parents and teachers agree that the students improve their logic, and they actually learn something when using these games.

On the other hand, teachers feel that students become more interested in the lessons and more motivated to participate actively, but that sometimes inappropriate use can lead to various frustrations of children, becoming nervous or even angry and, consequently, inattentive.

4. DISCUSSION

There is not a lot of study literature that measures how schools' use digital tools and resources, and if they use it how it affected their communications, or if it has influenced parents' behaviours, such as their involvement in their children's education and assistance with learning the specialized literature already provides encouraging proof that there are advantages to communicating with parents utilizing digital tools. Parents, teachers, and school administration using technology can improve students' focus on learning. But there are many researches that demonstrate how parents who are actively involved in their children's education (through participation in the classroom, encouragement of reading and homework, and the provision of learning resources) can affect their children's academic performance and attitude toward learning. (The Scottish Government, 2015)

The Scottish Government made a literature review on the impact of digital technology on learning and teaching in 2015, and they concluded that there is promising evidence that digital tools can help certain students overcome their obstacles, increases employability skills and career knowledge, enhances parent-teacher communications and saves time for teachers.

Teachers, researchers, and principals can learn a lot with digital tools and put it to use. Parents believe that there should be a healthy balance between the use of technology and active, hands-on learning in the classroom. People think that educators are substituting technology for solid practices in the classroom. Parents worry that as a result of the growing integration of technology, their children

would have less developed social skills and poorer information retention. There is concern about young children being exposed to technology too early as technology integration starts earlier and earlier in most districts. (Maxwell, Kamp & Cullen, 2021)

During the 2020 national lockdown, 4,600 parents from 19 countries participated in a survey. Their findings show that when schools provide or recommend well-structured technology, parents are more involved in their children's learning. People are less engaged when they believe the technical tools are difficult. When technology is beyond their level of expertise, they abandon any task. The study's findings have implications for governments and educational administrators. All those involved in education must be aware of the factors that influence technology usage. They can take steps to accommodate parents' needs while utilizing technology to aid learning. (Osorio-Saez, Eryilmaz & Sandoval-Hernandez, 2021)

5. CONCLUSIONS

Quality and successful schools embrace the partnership between the school and the family, and the literature and current pedagogical research places the school in a new light. The values of school must be shaped in a culture of development, anchored in the reality of the modern world because school cannot anymore afford to ignore other types of education or enter conflict with them.

Parents are aware of the positive values of using digital learning games in the classroom, including the fact that students learn skills to solve different problems in new and different contexts and situations from what they do in the rest of the class.

Digital educational games are also used as a teaching-learning method and tool (41% agree). With their help, parents state that the objectives of the lessons are achieved (61.8% agree).

We feel that professional development activities such as giving examples of outstanding practice for the design and implementation of learning activities that employ games as a framework are crucial to improving parents' digital skills. Furthermore, we think that optimal communication between parents and school-teacher is important, an increase of parents' involvement in all school activities and extracurricular activities in order to learn competences in the use of technology is necessary. It would be appropriate to teach the skill and techniques of intellectual work using digital educational games as a joint parent-child

By providing examples of best practices for the creation and execution of learning activities that use the game as a framework, professional development activities may help instructors improve their digital literacy. If we check Table 3, we can observe that teachers are convinced that using digital learning games in the classroom is very beneficial, creating more competences and skills for students. All of their responses were more than 50% in agreement.

Likewise, it is important that parents and teachers collaborate to find the right path for learning environment of the students. Teachers need to take advantage of parents' knowledge about their children, how they behave, how they feel, what they want, all the things they may be afraid or ashamed to tell teachers at school. But parents should also to take into consideration the experience of teachers in teaching with didactic games and didactic digital games because both parts have seen the advantages of the technology. By working together in this way, the school-family contract is acting as one for high quality education that really puts the child at the centre of education. (Sabou & Ciascai, 2020)

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