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Transformations and Challenges of Polish Educational Policy - Social Assessment and Future Perspectives

Introduction

Educational policy, also referred to by some as educational governance, is an integral part of the public policy of every country. In principle, it consists of a given set of principles and tools that enable its practical implementation. The responsibility for its execution rests with designated state authorities, which are part of the power structures (Podolski, Turnowiecki, 2001). Over the years, both the educational policy in Poland and the entire organizational structure and scope of competencies of the relevant authorities have undergone significant changes. These changes also reflect the evolution in the way successive governments and society perceive the very idea of education, as well as its goals and the methods employed (Kurzyna-Chmiel, 2013).

The education system in Poland, although managed at various levels, largely retains a centralized character. It is defined as a collection of educational institutions aimed at educating, nurturing, and caring, which are interconnected by specific relationships and dependencies. It includes schools of various levels, from kindergartens to higher education institutions, as well as other educational facilities, such as training centers for adults. The effectiveness of this system depends on the cooperation between institutions, which undoubtedly should collaborate, and therefore, exchange information, coordinate actions, and apply common standards and procedures (Ikonowicz, 2012).

Educational policy is a key element that shapes the entire education system in Poland. It consists of a set of strategic decisions and actions undertaken by the government and other competent bodies to direct and model the educational system. Its impact extends to many aspects, from the structure and organization of schools, through curricula, to the qualifications and training designed for teachers. This policy also plays a significant role in ensuring equal

access to education, the quality of teaching, and providing equal educational opportunities (Sadura, 2013).

Changing social, economic, and technological needs undoubtedly pose new challenges for educational policy, which it must address. Undoubtedly, it has a significant impact on shaping the social structure and social dynamics, potentially contributing both to the creation and reduction of social inequalities. It should be noted that one of the main goals of this policy is precisely to reduce social inequalities, which can be achieved, among other things, by ensuring equal access to education for all social groups (Niezgoda, 2011).

The social assessment of educational policy plays a key role in identifying areas that require attention and potential improvements. Understanding the social perception of educational policy, as well as the entire education system in practice, can serve as a barometer of the effectiveness of the changes introduced and as a tool for measuring satisfaction with the available educational services. Furthermore, opinions on equality of access to education and the educational system's readiness for changing social realities can reveal where educational policy may require adjustment or complete remodeling. Questions about potential reforms in evaluation and homework, or the introduction of gamification elements, highlight the dynamic nature of the debate on the future of education and its prospects.

The Essence of Education and Its Basic Tasks

Education is undoubtedly a continuous process that surrounds us everywhere and affects every individual from the earliest years. It begins at home, where children take their first educational steps under the watchful eyes of their parents, and later continues in formalized institutions. The word "education" derives from the Latin "educatio," meaning upbringing and instruction. Although it is commonly associated primarily with childhood, it in fact pertains to individuals of all ages, encompassing the continuous transformation of human consciousness (Illeris, 2014).

In the traditional sense, education consists of two main elements: upbringing and instruction. Upbringing in this context refers to actions aimed at enabling individuals to acquire the knowledge, skills, and competencies necessary to live in accordance with culturally shaped norms. Instruction, on the other hand, focuses on intellectual, physical, and emotional development, which translates into comprehensive personal growth. Although these two areas differ, they are inextricably linked and complement each other, which speaks to the complexity of the educational process (Cyzio, 2017).

Over time and with the development of civilization, the structure of education has undergone significant changes. After years, it has become a system based on educational policy. Establishing educational institutions such as schools and universities, as well as the development of various curricula, have significantly contributed to structuring the transmission of knowledge. Academic disciplines such as mathematics, art, humanities, and natural sciences have gained importance, and education has become a foundation of social and professional life (Wołoszyn, 2003). Access to education is intended to become increasingly universal, thereby playing a crucial role in enhancing social mobility and reducing inequalities, which in turn is essential to ensuring social justice (Trilling, Fadel, 2009).

Contemporary education must also meet the challenges arising from the dynamic changes occurring in the world. The development of information technology has enabled online teaching, as well as the creation of computer simulations and the use of artificial intelligence algorithms, making online learning, computer simulations, and the use of artificial intelligence increasingly common. This makes education more tailored to individual needs and more flexible, which is key in preparing students for future labor market challenges. It is important to emphasize that education not only involves the transmission of knowledge but also develops the entire personality of students, their values, ethics, and social skills (Kwasek, 2018).

It is also necessary to emphasize the need to modify educational policy in such a way that it can better meet the needs and challenges facing successive generations. Society's task is also to prepare an education system that will provide the next generations with the necessary skills and knowledge, but also support them in developing competencies that allow optimal functioning in society. Following this path, reforms in educational policy should consider changing expectations, introducing new elements that are more integrated with modern technologies. Education should be a process more individually tailored to the needs of students, which in turn requires educational systems to be more adaptable and innovative. Each generation is equally responsible for this (Nesterok, 2024).

Modern Educational Concepts

In recent decades, educational policy worldwide has undergone significant changes, adapting to the increasing demands of the modern world and the increasingly diverse needs of students. With the advent of new technologies, changing pedagogical approaches, and a growing

emphasis on individualizing the learning process, teachers and policymakers are exploring new teaching methods. Although these are not yet popular in Poland, in some parts of the world they offer innovative approaches to imparting knowledge and skills, increasing engagement and learning efficiency. According to researchers, the most promising are those related to gamification and gamification, which have been at the center of interest of several Polish universities for several years. Therefore, these concepts were included in the study.

Gamification in education involves applying mechanisms known from computer games to the teaching process. This aims to increase motivation and engagement among students. Gamification often uses points, badges, leaderboards, and other game elements to reward student progress and keep their interest in the material. It allows learning through apparent play, which can transform traditional educational methods into more interactive and motivating experiences (Deterding et al., 2011).

It is related to gamification. This involves applying game design and elements in non-traditional contexts, including education. However, it focuses more on competition and rivalry. By creating competitive situations, gamification encourages students to achieve better results and more effectively accomplish educational tasks. This is particularly effective in groups where students can compete and collaborate simultaneously (Huotari and Hamari, 2012).

Another noteworthy method is inquiry-based learning, which mainly encourages students to learn by asking questions, conducting research, and exploring. Inquiry-based learning emphasizes the learning process in which students are more active and engage in seeking knowledge. This puts students in the role of active researchers, who themselves formulate questions, seek answers, and exhaust topics related to given lessons. This method promotes critical thinking and independence, as well as develops analytical skills, since students do not receive ready answers but largely discover knowledge on their own. This leads to a deeper understanding of the content they need to master. This method can successfully be combined with gamification and gamification (Kuhlthau et al., 2007).

Metodology

The aim of the conducted research was to explore the social perception of Polish educational policy, considering various aspects of the education system such as the effectiveness of political reforms, adaptation of curricula, utilization of new technologies, and equality of access to education. The main research problems focused on assessing the overall state of the education system, the effectiveness of the educational policy conducted, and the adaptation of

curricula to the needs of students and future challenges. The study also aimed to understand social expectations regarding the introduction of innovative methods such as gamification and gamification.

This research is important from a social, pedagogical, and political science perspective, making it interdisciplinary. The results of the study shed light on the important role that public policy plays in shaping educational systems and responding to social expectations and challenges. Undoubtedly, political decisions have a direct impact on the quality, accessibility, and methods of teaching, which consequently affects citizens' perception of the education system and the reforms introduced.

The study defined the following research questions:

- How is the overall state of Polish educational policy, understood as the state of the education system, assessed?
- How are the reforms carried out in Polish educational policy since 1989 assessed?
- How is Polish educational policy assessed in terms of preparing for life in the contemporary world?
- How is Polish educational policy assessed in terms of adapting curricula to the needs of students?
- How is Polish educational policy assessed in terms of adapting curricula to future challenges?
- How is Polish educational policy assessed in terms of utilizing new technologies?
- How is Polish educational policy assessed in terms of keeping up with social changes?
- How is the idea of changes in Polish educational policy involving a move away from homework assessed?
- How is the idea of changes in Polish educational policy involving a move away from grading assessed?
- How is the equality of access for all students to high-quality education assessed?
- How is the idea of introducing gamification and gamification in Polish schools assessed?

A proprietary questionnaire was used to collect data, which contained 11 closed questions linked to the research questions. This tool was developed with the intention of a comprehensive analysis of the perception of the educational system in Poland, allowing the researcher to thoroughly evaluate various aspects of education. The respondents were 201 individuals from various demographic groups, enabling analysis of results also in the context of gender, age, education level, and place of residence.

The survey was conducted in a way that allowed obtaining representative answers to the questions posed to the participants, providing a valuable source of knowledge about the current state and expectations related to the Polish education system. It was conducted using the snowball method via an online survey using Google Forms.

Social Assessment of Polish Educational Policy – Empirical Research Results

To conduct the study, a proprietary questionnaire was used, developed to analyze the perception of various aspects of education in Poland. This tool was constructed to include significant issues such as educational policy reforms, curriculum adaptation, the use of new technologies, equality of access to education, and potential changes in teaching and grading methods.

The research involved a total of 201 participants from different age groups, including representation by gender, educational level, and place of residence. Reliability analysis was conducted using the method of internal consistency, and the Cronbach's alpha coefficient was employed to saseks coherence and reliability. The results indicate that the tool is internally consistent, coherent, and reliable. The validity of the questionnaire was assessed through factor analysis, which confirmed the separation of designed questions according to the original construction assumptions of the tool.

The questionnaire includes a total of 11 questions with varied response formats, allowing for a detailed analysis of respondents' opinions on individual aspects of the education system. In the demographic section, participants were asked about their gender, age group, educational background, and place of residence, enabling a thorough analysis of data in a demographic context.

The questions addressed the overall state of the education system, the effectiveness of the implemented educational policy, the adaptation of curricula to the needs of students, preparation of students for future challenges, the use of new technologies in education, response to social changes, the application of homework and grading systems, the accessibility of high-quality education for all students, and the introduction of gamification and gamification elements into schools.

Respondents rated the overall state of Polish educational policy on a 5-point scale. In the next 6 questions, they assessed various factors contributing to the evaluation of specific elements on a 3-point scale. The last 4 questions concerned access to high-quality education, as well as

publicly debated ideas related to homework, grading, and the introduction of gamification and gamification.

The uniqueness of the proprietary questionnaire stems primarily from its comprehensive approach to analyzing the perception of the Polish education system, despite a small number of questions, as well as its specificity in responses. This allowed for gathering a relatively large amount of responses from the surveyed. It was also developed based on current debates and challenges in the field of education. As a result, this tool not only deepens the understanding of the current state of education but also identifies areas requiring changes or improvements. Additionally, the questionnaire was designed to enable thorough analysis in a demographic context, which is crucial for understanding differences in perception among various social groups. Such comprehensiveness and versatility make this tool a valuable source of knowledge about the Polish education system, offering unique perspectives on its strengths and weaknesses, as well as potential directions for development.

The following questions were asked, denoted by appropriate abbreviations:

- How do you assess the overall state of the education system in the Republic of Poland? (PYT1_STAN)
- Do you think that the reforms of Polish educational policy that have taken place since 1989 are beneficial for students? (PYT2_KORZ)
- Do you believe that the current educational policy is effective in preparing young people for life in the modern world? (PYT3_PRZYG)
- Do you think that the curricula are adequately adapted to the needs of students? (PYT4_PROGR)
- Do you think that the existing curricula prepare students for the challenges of the future? (PYT5_WYZW)
- Do you think that Polish educational policy sufficiently utilizes new technologies? (PYT6_TECH)
- Do you believe that the state of Polish education keeps up with advancing social changes? (PYT7_ZMIANY)
- Do you think that Polish schools should move away from assigning homework? (PYT8_ZADDOM)
- Do you think that Polish schools should move away from grading? (PYT9_OCEN)
- Do you think that all students have equal opportunities to access high-quality education? (PYT10_DOST)

- Do you support the introduction of gamification* into Polish schools? (PYT11_GAME)

Table 1 *Reliability Analysis of Overall Score and Individual Factors (N=201)*

	mean	standard deviation	cronbach's-α
pyt1_stan	2,213930	0,953418	0,422770
pyt2_korz	2,000000	0,734847	0,572890
pyt3_przyg	1,477612	0,686110	0,479760
pyt4_progr	1,407960	0,502729	0,434815
pyt5_wyzw	1,308458	0,659074	0,448416
pyt6_tech	1,577114	0,596048	0,461632
pyt7_zmiany	1,338308	0,484742	0,462974
pyt8_zaddom	1,582090	0,494447	0,656603
pyt9_ocen	1,621891	0,486126	0,633808
pyt10_dost	1,323383	0,468935	0,598423
pyt11_game	1,900498	0,300083	0,542573

source: own work based on research

In the study, a total of 201 individuals were included, of which 88 participants (43.78%) were women, 112 participants (55.72%) were men, and 1 participant (0.50%) identified as non-binary.

Table 2 *Characteristics of Survey Participants by Gender (N=332)*

	quanity	%
woman	88	43,78
man	112	55,72
other	1	0,50
total	**201**	**100,00%**

The age distribution of the participants is as follows:

- 39 people (19.40%) were aged 18 to 25 years;
- 76 people (37.81%) were aged 26 to 35 years;
- 52 people (25.87%) were aged 36 to 60 years;
- 34 people (16.92%) were aged 61 to 75 years.

Table 4 *Characteristics of Survey Participants by Age Group (N=201)*

	quanity	%
18–25	39	19,40%
26–35	76	37,81%
36–60	52	25,87%
61–75	34	16,92%
total	**201**	**100,00%**

As for education, the distribution is as follows:

- 42 respondents (20.90%) declared basic education;
- 20 respondents (9.95%) declared vocational education;
- 63 respondents (31.34%) declared secondary education;
- 76 respondents (37.81%) declared higher education.

Table 5 *Characteristics of Survey Participants by Education (N=201)*

	quanity	%
basic	42	20,90%
vocational	20	9,95%
secondary	63	31,34%
higher	76	37,81%
total	**201**	**100,00%**

The majority of the participants, as many as 158 people (78.60%), live in cities with more than 100,000 inhabitants, 21 people (10.45%) live in towns with up to 100,000 inhabitants, and 22 people (10.95%) live in rural areas.

Table 6 *Characteristics of Survey Participants by Place of Residence (N=201)*

	quanity	%
village	22	10,95%
small city	21	10,44%
city	158	78,60%
total	**201**	**100,00%**

source: own work based on research

The analysis of the overall state of Polish educational policy reveals significant differences in perceptions depending on demographic factors such as gender, age, and the place of residence of the respondents. The study did not record any highly positive opinions, indicating a critical approach by participants towards the state of educational policy in Poland.

Among gender differences, it was significant that men predominantly rated the educational policy positively and neutrally, while women more often expressed negative opinions. The scarcity of positive ratings among women may indicate a more critical or demanding attitude towards educational policy, which provides inspiration for further research in this area.

The majority of positive evaluations came from individuals between 36 and 60 years old. This might suggest that older generations have a more optimistic view of Polish educational policy or recognize positive changes compared to the education they experienced in the past. Younger age groups rated Polish educational policy neutrally and negatively, which may reflect their dissatisfaction with the current education system.

The place of residence also influenced the evaluation. Positive opinions were expressed by those living in rural areas, which might suggest that their expectations of the education system are different, or that they see certain positive aspects that go unnoticed by urban residents. Conversely, residents of small towns and cities more often rated educational policy negatively, which could stem from a greater awareness of systemic problems or differences in the quality of education, class sizes, and the impact on the operation of institutions.

Table 7 *Table of Frequency of Respondents Based on Their Assessment of the Overall State of Polish Educational Policy (N=201)*

	quanity	%
very positive	0	0,00%
positive	22	10,95%
neutral	51	25,37%
negative	76	37,81%
very negative	52	25,87%

source: own work based on research

Table 8 *Table of Frequency of Respondents Based on Their Assessment of the Overall State of Polish Educational Policy Divided by Gender (N=201)*

	woman		man		other	
	quanity	%	quanity	%	quanity	%
very positive	0	0%	0	0%	0	0%
positive	0	0%	22	11%	0	0%
neutral	20	10%	30	15%	1	0%
negative	36	18%	40	20%	0	0%
very negative	32	16%	20	10%	0	0%

source: own work based on research

Table 9 *Table of Frequency of Respondents Based on Their Assessment of the Overall State of Polish Educational Policy Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	%	quanity	%	quanity	%	quanity	%
very positive	0	0%	0	0%	0	0%	0	0%
positive	0	0%	0	0%	22	11%	0	0%
neutral	21	10%	38	19%	30	15%	0	0%

negative	18	9%	38	19%	0	0%	20	10%
very negative	0	0%	0	0%	0	0%	14	7%

source: own work based on research

Table 10 *Table of Frequency of Respondents Based on Their Assessment of the Overall State of Polish Educational Policy Divided by Place of Residence (N=201)*

	village		small city		city	
	quanity	**%**	**quanity**	**%**	**quanity**	**%**
very positive	0	0%	0	0%	0	0%
positive	22	11%	0	0%	0	0%
neutral	0	0%	21	10%	30	15%
negative	0	0%	0	0%	76	38%
very negative	0	0%	0	0%	52	26%

source: own work based on research

The analysis of the assessment of the benefits of reforms conducted in Poland after 1989 reveals diverse perspectives among the respondents, also revealing interesting patterns depending on gender, age, and place of residence. The study results suggest that opinions about the benefits of these reforms are divided, which may indicate the complexity of the experienced changes and their varying impact on citizens' lives.

Positive evaluations came from women, while men dominated in groups considering the reforms unfavorable and partially favorable. This suggests a more critical or varied approach to changes in the system.

Age analysis reveals that younger age groups, i.e., individuals between 18 and 35 years old, were more inclined to perceive the reforms as beneficial, which may reflect the optimism of the younger generation or their better adaptation to changes. They were also less affected by the comprehensive changes introduced by Mirosław Handke. However, individuals between 26 and 35 years old were more critical in their assessments than the younger group. In the group of respondents aged 36 to 60 years, partial benefits of the reforms were most often pointed out. Interestingly, the oldest group of respondents also tended toward negative

evaluations, which may suggest disappointment with the results of the changes or a longing for the stability of the period before the reforms.

City residents assessed the reforms as unfavorable. This may indicate that the experience of urbanization and faster socio-economic changes in cities affects the perception of reforms. Both favorable and partially favorable assessments of the reforms were evenly distributed among residents of rural areas and small towns, showing that recognizing the positive aspects of reforms may be independent of the place of residence.

Table 11 *Frequency of Respondents Based on Their Assessment of the Benefits of Reforms Implemented After 1989 (N=201)*

	quanity	%
unfavorable	54	27%
partially favorable	93	46%
favorable	54	27%

source: own work based on research

Table 12 *Frequency of Respondents Based on Their Assessment of the Benefits of Reforms Implemented After 1989 Divided by Gender (N=201)*

	woman		man		other	
	quanity	%	quanity	%	quanity	%
unfavorable	14	7%	40	20%	0	0%
partially favorable	20	10%	72	36%	1	0%
favorable	54	27%	0	0%	0	0%

source: own work based on research

Table 13 *Frequency of Respondents Based on Their Assessment of the Benefits of Reforms Implemented After 1989 Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	%	quanity	%	quanity	%	quanity	%
unfavorable	0	0%	40	20%	0	0%	14	7%

partially favorable	21	10%	0	0%	52	26%	20	10%
favorable	18	9%	36	18%	20	10%	0	0%

source: own work based on research

Table 14 *Frequency of Respondents Based on Their Assessment of the Benefits of Reforms Implemented After 1989 Divided by Place of Residence (N=201)*

	village		small city		city	
	quanity	**%**	**quanity**	**%**	**quanity**	**%**
unfavorable	0	0%	0	0%	54	27%
partially favorable	22	11%	21	10%	50	25%
favorable	0	0%	0	0%	54	27%

source: own work based on research

The analysis of the effectiveness of preparing Polish students for life in the modern world within the context of Polish educational policy reveals deep pessimism among respondents. As many as 63% of those surveyed believe that the education system does not prepare young people for contemporary challenges, highlighting a critical approach to the state of Polish education. This indicates a need for revision and adaptation of the Polish educational system to better meet the needs and challenges of the modern world. The clear negative evaluation among the majority of respondents, regardless of their place of residence, as well as noticeable differences in perceptions based on gender and age, underline the complexity of the issues.

A portion of men considered the preparation of Polish students for life in the modern world by the education system as positive, which may indicate differences in perception between genders. Meanwhile, women, who constitute the majority among those evaluating negatively, may experience or perceive different aspects of the educational system than men. The absence of positive opinions among women and non-binary individuals suggests that further research is needed to better understand these disparities.

Positive evaluations were mostly from individuals aged 36 to 60 years, which may suggest that this age group sees more benefits from current educational methods or may not be aware of what the educational policy entails, as they are outside the system. However, in younger generations, particularly among those aged 18 to 25, there is significant skepticism. People

over the age of 61 also responded very critically. This may indicate skepticism among young people and a lack of trust in the education system among older generations.

Rural residents perceive the education system as more effective in preparing students for life in the modern world than do residents of small towns and cities, which may reflect differences in expectations or educational experiences depending on the place of residence. City and town residents expressed more negative evaluations, which may result from greater exposure to the diverse educational and social challenges that life in larger agglomerations brings.

Table 15 *Frequency of Respondents Based on Their Assessment of the Effectiveness of Preparing Polish Students for Life in the Contemporary World in the Context of Polish Educational Policy (N=201)*

	quanity	%
positive	22	11%
neutral	52	26%
negative	127	63%

source: own work based on research

Table 16 *Frequency of Respondents Based on Their Assessment of the Effectiveness of Preparing Polish Students for Life in the Contemporary World in the Context of Polish Educational Policy Divided by Gender (N=201)*

	woman		man		other	
	quanity	%	quanity	%	quanity	%
positive	0	0%	22	11%	0	0%
neutral	32	16%	20	10%	0	0%
negative	56	28%	70	35%	1	0%

source: own work based on research

Table 17 *Frequency of Respondents Based on Their Assessment of the Effectiveness of Preparing Polish Students for Life in the Contemporary World in the Context of Polish Educational Policy Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	%	quanity	%	quanity	%	quanity	%

	quanity	%	quanity	%	quanity	%	quanity	%
positive	0	0%	0	0%	22	11%	0	0%
neutral	18	9%	0	0%	0	0%	34	17%
negative	21	10%	76	38%	30	15%	0	0%

source: own work based on research

Table 18 *Frequency of Respondents Based on Their Assessment of the Effectiveness of Preparing Polish Students for Life in the Contemporary World in the Context of Polish Educational Policy Divided by Place of Residence (N=201)*

	village		small city		city	
	quanity	**%**	**quanity**	**%**	**quanity**	**%**
positive	22	11%	0	0%	0	0%
neutral	0	0%	0	0%	52	26%
negative	0	0%	21	10%	106	53%

source: own work based on research

The analysis of the assessment of the adaptation of Polish educational programs to the needs of students reveals deep reservations among the respondents. The vast majority of respondents rated this adaptation negatively, indicating a widely held belief in the inadequacy of current educational programs. This sentiment is often expressed in society, including by the teaching staff themselves, aligning with observations made by researchers in this area.

The distribution of opinions based on gender shows that negative assessments prevail among both women and men, with a slightly higher prevalence among men. While a greater proportion of men, compared to women, have a positive opinion about the adaptation of teaching programs to the needs of students, it is not statistically significant. This may suggest that men and women perceive issues in Polish education similarly.

Analysis of the research results by age indicates that negative assessments are mainly concentrated among individuals aged 26 to 35, which may reflect their recent experiences with the education system or their current involvement in the education of their own children. Interestingly, there are essentially no fully positive assessments among the youngest and oldest age groups.

The only positive assessment of the adaptation of teaching programs to the needs of students comes from a resident of rural areas, suggesting perceptual differences depending on the respondent's living environment. Among the negative assessments, residents of large cities clearly dominate, suggesting that difficulties in adapting teaching programs are more pronounced in larger urban areas.

Table 19 *Table of frequencies of respondents based on the assessment of the adaptation of Polish teaching programs to the needs of students (N=201)*

	quanity	%
positive	1	0%
neutral	80	40%
negative	120	60%

source: own work based on research

Table 20 *Table of frequencies of respondents based on the assessment of the adaptation of Polish teaching programs to the needs of students Divided by Gender (N=201)*

	woman		man		other	
	quanity	%	quanity	%	quanity	%
positive	0	0%	1	0%	0	0%
neutral	38	19%	41	20%	1	0%
negative	50	25%	70	35%	0	0%

source: own work based on research

Table 21 *Table of frequencies of respondents based on the assessment of the adaptation of Polish teaching programs to the needs of students Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	%	quanity	%	quanity	%	quanity	%
positive	0	0%	0	0%	1	0%	0	0%
neutral	39	20%	0	0%	21	10%	20	10%

negative	0	0%	76	38%	30	15%	14	7%

source: own work based on research

Table 22 *Table of frequencies of respondents based on the assessment of the adaptation of Polish teaching programs to the needs of students Divided by Place of Residence (N=201)*

	village		small city		city	
	quanity	**%**	**quanity**	**%**	**quanity**	**%**
positive	1	0%	0	0%	0	0%
neutral	21	10%	21	10%	38	20%
negative	0	0%	0	0%	120	60%

source: own work based on research

The analysis of the adaptation of Polish curricula to future challenges shows that among the respondents, a negative evaluation also dominates in this area. Such results indicate a widespread opinion that the current education system is unable to adequately prepare young people for upcoming challenges.

Both women and men overwhelmingly assessed the adaptation of curricula to the future negatively, with a higher percentage of negative evaluations among men than women. Only one man rated the curricula positively, suggesting a general critical stance towards educational policy, regardless of gender.

Age-based analysis reveals that both the youngest and oldest age groups do not regard the adaptation of Polish curricula to future challenges positively, which may indicate a common belief in the ineffectiveness of current teaching methods in preparing students for the future. A sporadically positive evaluation can be found from someone aged between 36 and 60 years, indicating a glimpse of optimism in this group.

The only fully positive evaluation regarding the adaptation of curricula to future challenges came from a rural resident. Residents of small towns and cities mostly rated the education system negatively, with an exceptionally high percentage of negative evaluations in cities, which may reflect higher expectations or a better understanding of future challenges by residents of larger urban areas.

Table 23 *Table of frequencies of respondents based on the assessment of the adaptation of Polish teaching programs to the challenges facing students in the future (N=201)*

	quanity	%
positive	22	11%
neutral	18	9%
negative	161	80%

source: own work based on research

Table 24 *Table of frequencies of respondents based on the assessment of the adaptation of Polish teaching programs to the challenges facing students in the future Divided by Gender (N=201)*

	woman		man		other	
	quanity	%	quanity	%	quanity	%
positive	0	0%	1	0%	0	0%
neutral	38	20%	41	20%	1	0%
negative	50	25%	70	35%	0	0%

source: own work based on research

Table 25 *Table of frequencies of respondents based on the assessment of the adaptation of Polish teaching programs to the challenges facing students in the future Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	%	quanity	%	quanity	%	quanity	%
positive	0	0%	0	0%	1	0%	0	0%
neutral	39	20%	0	0%	21	10%	20	10%
negative	0	0%	76	38%	30	15%	14	7%

source: own work based on research

Table 26 *Table of frequencies of respondents based on the assessment of the adaptation of Polish teaching programs to the challenges facing students in the future Divided by Place of Residence (N=201)*

	village	small city	city

	quanity	%	quanity	%	quanity	%
positive	1	0%	0	0%	0	0%
neutral	21	10%	21	10%	38	20%
negative	0	0%	0	0%	120	60%

source: own work based on research

The analysis of the assessment of the use of new technologies in Polish educational policy shows that opinions on this aspect are more divided, although with a predominance of negative assessments. This indicates that a significant portion of respondents believe that new technologies are not sufficiently effectively integrated into the education system, or their utilization does not yield the expected results.

Gender-wise, noticeable differences are observed. Most positive assessments come from men, who still mostly rated this aspect negatively, while women tend to lean towards NEUTRAL or negative assessments. This distribution may suggest that men are more inclined to perceive the benefits of integrating new technologies in education, whereas women may have a more varied or critical approach to this issue.

Age-wise analysis indicates that positive assessments mainly concentrate in the group aged 36 to 60, suggesting that middle-aged individuals perceive the potential of new technologies in education. Younger age groups, despite being native users of technology, mainly expressed NEUTRAL and negative opinions, indicating disappointment in how technologies are utilized in education.

Village residents expressed the most negative opinions, reflecting higher expectations or greater awareness of the limitations of current technology utilization in education in larger urban areas. On the other hand, rural and small-town residents less frequently expressed negative assessments, indicating less experience with modern technologies in an educational context or different expectations regarding these technologies.

Table 27 *Table of Frequency of Respondents Based on Their Assessment of the Use of New Technologies in Polish Educational Policy (N=201)*

	quanity	%
positive	11	5%

neutral	94	47%
negative	96	48%

source: own work based on research

Table 28 *Table of Frequency of Respondents Based on Their Assessment of the Use of New Technologies in Polish Educational Policy Divided by Gender (N=201)*

	woman		man		other	
	quanity	**%**	**quanity**	**%**	**quanity**	**%**
positive	1	0%	10	5%	0	0%
neutral	51	26%	42	21%	1	0%
negative	36	18%	60	30%	0	0%

source: own work based on research

Table 29 *Table of Frequency of Respondents Based on Their Assessment of the Use of New Technologies in Polish Educational Policy Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	**%**	**quanity**	**%**	**quanity**	**%**	**quanity**	**%**
positive	1	0%	0	0%	10	5%	0	0%
neutral	20	10%	18	9%	22	11%	34	17%
negative	18	9%	58	29%	20	10%	0	0%

source: own work based on research

Table 30 *Table of Frequency of Respondents Based on Their Assessment of the Use of New Technologies in Polish Educational Policy Divided by Place of Residence (N=201)*

	village		small city		city	
	quanity	**%**	**quanity**	**%**	**quanity**	**%**
positive	0	0%	1	0%	10	5%
neutral	22	11%	20	10%	52	26%

negative	0	0%	0	0%	96	48%

Analysis of the assessment of Polish educational policy keeping pace with social changes reveals clear criticism from respondents. The vast majority of participants evaluated that Polish educational policy is not keeping pace with social changes. This indicates significant challenges for successive governments in adapting Polish educational policy to the rapidly changing world.

Gender breakdown shows that negative assessments prevail among both women and men, albeit with slightly more negative opinions among men. Additionally, the only positive assessment comes from a man, indicating very limited optimism among respondents regarding the phenomenon under study.

Age-based analysis sheds light on the varied perceptions of the issue depending on respondents' age. Participants aged 26 to 35 exhibit the greatest pessimism regarding the phenomenon under study. This may reflect their direct experiences with the difficulties that the educational system has faced or is facing in the context of current social changes.

Rural residents express the most negative opinions in this regard, suggesting that the challenges associated with the rapid pace of social and technological changes are more visible in larger cities, where Polish educational policy seems to lag behind. Residents of rural areas and small towns showed more balanced opinions, with a greater tendency toward neutral assessments.

Table 31 *Table of Frequency of Respondents Based on Their Assessment of Polish Educational Policy Keeping Pace with Social Changes (N=201)*

	quanity	**%**
positive	1	0%
neutral	66	33%
negative	134	67%

Table 32 *Table of Frequency of Respondents Based on Their Assessment of Polish Educational Policy Keeping Pace with Social Changes Divided by Gender (N=201)*

	woman		man		other	
	quanity	%	quanity	%	quanity	%
positive	0	0%	1	0%	0	0%
neutral	34	17%	31	15%	1	0%
negative	54	28%	80	40%	0	0%

source: own work based on research

Table 33 *Table of Frequency of Respondents Based on Their Assessment of Polish Educational Policy Keeping Pace with Social Changes Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	%	quanity	%	quanity	%	quanity	%
positive	0	0%	0	0%	1	0%	0	0%
neutral	21	10%	0	0%	31	15%	14	7%
negative	18	9%	76	39%	20	10%	20	10%

source: own work based on research

Table 34 *Table of Frequency of Respondents Based on Their Assessment of Polish Educational Policy Keeping Pace with Social Changes Divided by Place of Residence (N=201)*

	village		small city		city	
	quanity	%	quanity	%	quanity	%
positive	0	0%	0	0%	1	0%
neutral	22	11%	21	10%	23	11%
negative	0	0%	0	0%	134	68%

source: own work based on research

The analysis of the assessment regarding the idea of eliminating homework in the Polish education system indicates a prevailing opinion among respondents in favor of limiting or completely eliminating homework. This majority may suggest a belief in the need for changes

in the approach to teaching and learning, emphasizing the necessity of seeking alternative methods of education.

When divided by gender, it is evident that both women and men overwhelmingly support the discontinuation of homework, although the percentage is slightly higher among men. This difference may reflect varying educational experiences and expectations between genders, as well as potential differences in the perception of the role and effectiveness of homework in the teaching process.

However, there are clear differences in opinion among age groups. Among proponents of abandoning homework, the group between 26 and 35 years old clearly dominates, suggesting that these individuals, perhaps as parents of younger children or recalling their own school experiences, recognize the negative aspects of homework burden. On the other hand, the older age group, where some respondents advocate for keeping homework, may have a more traditional approach to education.

Urban residents are significantly more inclined to support the elimination of homework, which may reflect greater awareness of modern educational methods or higher domestic workload in urban areas. Among rural residents, the prevailing view is that homework should remain. This may suggest different educational experiences in various environments.

Table 35 *Table of Frequency of Respondents Based on Their Assessment of the Existence of Homework in the Polish Education System (N=201)*

	quanity	%
keep	84	42%
abandon	117	58%

source: own work based on research

Table 36 *Table Table of Frequency of Respondents Based on Their Assessment of the Existence of Homework in the Polish Education System Divided by Gender (N=201)*

	woman		man		other	
	quanity	%	quanity	%	quanity	%
keep	32	16%	52	26%	0	0%
abandon	56	28%	60	30%	1	0%

source: own work based on research

Table 37 *Table Table of Frequency of Respondents Based on Their Assessment of the Existence of Homework in the Polish Education System Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	%	quanity	%	quanity	%	quanity	%
keep	18	9%	0	0%	52	26%	14	7%
abandon	21	10%	76	38%	0	0%	20	10%

Table 38 *Table Table of Frequency of Respondents Based on Their Assessment of the Existence of Homework in the Polish Education System Divided by Place of Residence (N=201)*

	village		small city		city	
	quanity	%	quanity	%	quanity	%
keep	22	11%	0	0%	62	31%
abandon	0	0%	21	10%	96	48%

source: own work based on research

Analysing the assessment of the possibility of abolishing grading in Polish schools reveals a clear tendency among respondents in favor of abandoning this system. This indicates a growing belief in the need to explore alternative methods of assessing students' progress that may better cater to individual development needs and motivation for learning.

Gender division shows significant differences in opinions. Men are more likely to support maintaining the grading system, while the majority of women favor moving away from traditional grading. This difference may reflect diverse educational experiences or different approaches to the issues of motivation and educational achievement assessment.

Among age groups, the strongest support for moving away from the grading system came from respondents aged 26 to 35, suggesting that these individuals, perhaps as parents of younger children or recalling their own educational process, critically assess the impact of grades on students' development and well-being. On the other hand, older age groups, which more often advocated for maintaining the grading system, may be more attached to traditional educational methods.

Analysis of responses based on respondents' places of residence reveals that residents of cities are the strongest supporters of moving away from the grading system, which may indicate greater exposure to modern educational approaches or a greater awareness of the negative aspects of grading. Rural residents, although to a lesser extent, showed support for maintaining the grading system while not expressing clear support for moving away from it.

Table 39 *Table of respondent counts depending on the assessment of the existence of grading in the Polish education system (N=201)*

	quanity	%
keep	76	38%
abandon	125	62%

source: own work based on research

Table 40 *Table of respondent counts depending on the assessment of the existence of grading in the Polish education system Divided by Gender (N=201)*

	woman		man		other	
	quanity	%	quanity	%	quanity	%
keep	14	7%	62	31%	0	0%
abandon	74	37%	50	25%	1	0%

source: own work based on research

Table 41 *Table of respondent counts depending on the assessment of the existence of grading in the Polish education system Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	%	quanity	%	quanity	%	quanity	%
keep	0	0%	0	0%	42	21%	34	17%
abandon	39	19%	76	38%	10	5%	0	0%

source: own work based on research

Table 42 *Table of respondent counts depending on the assessment of the existence of grading in the Polish education system Divided by Place of Residence (N=201)*

	village		small city		city	
	quanity	%	quanity	%	quanity	%
keep	22	11%	0	0%	54	27%
abandon	0	0%	21	10%	104	52%

source: own work based on research

The analysis of the assessment of equal access to high-quality education among Polish students indicates a clear belief among the majority of respondents that such equal access does not exist. This opinion may reflect a perception of inequality and barriers in the education system that affect the educational opportunities of children and youth.

In terms of gender, a higher percentage of men than women believe that equal access to education does not exist, suggesting differences in the perception of educational inequality between genders. Although women also largely agree with this opinion, men seem to be more convinced of its validity.

The greatest pessimism regarding equal access to education is found in the age group of respondents aged 26 to 35, which may stem from direct experiences related to their own education or that of their children. Interestingly, in the youngest age group, a higher percentage of respondents believe that equal access to education exists, which may reflect a more optimistic attitude among younger individuals or less experience with inequality.

The division of respondents according to their place of residence shows a significant difference between urban and rural communities. As much as 57% of urban residents believe that equal access to education does not exist, indicating greater awareness of educational issues in larger urban areas. Conversely, in small towns and rural areas, such a response is less common, which may be due to differences in the availability of educational resources and local experiences.

Table 43 *Table of the number of respondents according to the assessment of equal access to high-quality education among Polish students (N=201)*

	quanity	%
no	135	68%
yes	65	32%

Table 44 *Table of the number of respondents according to the assessment of equal access to high-quality education among Polish students Divided by Gender (N=201)*

	woman		man		other	
	quanity	%	quanity	%	quanity	%
no	54	27%	82	40%	0	0%
yes	34	18%	30	15%	1	0%

Table 45 *Table Table of the number of respondents according to the assessment of equal access to high-quality education among Polish students Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	%	quanity	%	quanity	%	quanity	%
no	18	9%	56	28%	42	21%	20	10%
yes	21	10%	20	10%	10	5%	14	7%

Table 46 *Table of the number of respondents according to the assessment of equal access to high-quality education among Polish students Divided by Place of Residence (N=201)*

	village		small city		city	
	quanity	%	quanity	%	quanity	%
no	22	11%	0	0%	114	57%
yes	0	0%	21	10%	44	22%

The analysis of the willingness to introduce gamification and game-based learning into Polish educational policy indicates a very positive reception of this concept by the surveyed individuals, with an overwhelming majority advocating for its implementation. It is worth noting that the survey included explanations of these two concepts, ensuring understanding of

the question by the respondents. Such high level of support may reflect the belief in the potential of these methods to increase student engagement and improve the effectiveness of the educational process.

Gender breakdown reveals that both women and men strongly support the introduction of gamification and game-based learning into Polish education. The only opposition to the implementation of such methods comes solely from a small percentage of men, suggesting some differences in perception of modern teaching methods between genders, but overall both groups strongly endorse the idea of gamification.

Age analysis shows unanimous acceptance of introducing gamification and game-based learning in all age groups, although there were a few voices of opposition in the group aged 26 to 35. This may suggest that individuals in this age range, potentially being parents of younger children, may have some concerns about the introduction of these methods, but still the majority in this age group are in favor of their implementation.

Residential area breakdown demonstrates that urban residents are the most enthusiastic about the introduction of gamification and game-based learning, while residents of small towns and rural areas also show broad support, albeit more reserved. This may indicate that urban residents, who may have better access to modern technologies, see greater potential in these teaching methods.

Table 47 *Table of respondents' counts depending on the willingness to introduce gamification and gaming into Polish educational policy (N=201)*

	quanity	%
do not implement	20	10%
implement	181	90%

source: own work based on research

Table 44 *Table of respondents' counts depending on the willingness to introduce gamification and gaming into Polish educational policy Divided by Gender (N=201)*

	woman		man		other	
	quanity	%	quanity	%	quanity	%
do not implement	0	0%	20	10%	0	0%

implement	88	44%	92	46%	1	0%

source: own work based on research

Table 45 *Table of respondents' counts depending on the willingness to introduce gamification and gaming into Polish educational policy Divided by Age Groups (N=201)*

	18–25		26–35		36–60		61–75	
	quanity	**%**	**quanity**	**%**	**quanity**	**%**	**quanity**	**%**
do not implement	0	0%	20	10%	0	0%	0	0%
implement	39	19%	56	28%	52	26%	34	17%

source: own work based on research

Table 46 *Table of respondents' counts depending on the willingness to introduce gamification and gaming into Polish educational policy Divided by Place of Residence (N=201)*

	village		small city		city	
	quanity	**%**	**quanity**	**%**	**quanity**	**%**
do not implement	0	0%	0	0%	20	10%
implement	22	11%	21	10%	138	69%

source: own work based on research

Statistical analysis of various aspects concerning Polish educational policy has revealed significant conclusions about the opinions of respondents. The Shapiro-Wilk test was used to assess the normality of the distributions of individual variables, which is crucial when deciding on the possibility of using parametric tests. All variables showed a p-value <0.05, suggesting that the distributions are not normal. However, the analysis of skewness and kurtosis for most variables revealed that their values are within the range of -1 to 1, which may indicate a slight deviation from a normal distribution.

Mean assessments of individual aspects of educational policy, such as the overall state of the education system (PYT1_STAN), benefits from reforms (PYT2_KORZ), or the adaptation of curricula to future challenges (PYT5_WYZW), indicate diversity in respondents' opinions. For example, the mean rating of the state of the education system was 2.21 on a scale of 1 to 5, suggesting a critical stance towards the current state of the education system in Poland.

The most significant deviations from a normal distribution were noted in assessments concerning the use of new technologies (PYT6_TECH) and equal access to high-quality education (PYT10_DOST), where skewness and kurtosis indicate greater variability in opinions. This may reflect divergent experiences and expectations of respondents regarding these aspects of educational policy.

Conversely, the very positive assessment of the introduction of gamification and game-based learning into education (PYT11_GAME) with an average of 1.90 on a scale from 1 to 2, with very low variance, indicates broad support for these modern teaching methods among study participants.

The results of descriptive statistics indicate the complexity and multidimensionality of opinions regarding Polish educational policy, simultaneously highlighting areas that respondents believe require improvement or innovation, such as the use of technology in education or ensuring equal access to high-quality teaching.

Table 47 *Descriptive Statistics of Surveyed Variables for the Entire Group of Respondents (N=201)*

	mean	min.	max.	variance	skewness	kurtosis	Shapiro–Wilk test
PYT1_STAN	2,21	1	4	0,909005	0,32839	-0,82301	W=0,87 p=0,00
PYT2_KORZ	2,00	1	3	0,540000	0,00000	-1,13728	W=0,81 p=0,00
PYT3_PRZYG	1,48	1	3	0,470746	1,11331	-0,05427	W=0,68 p=0,00
PYT4_PROGR	1,41	1	3	0,252736	0,49640	-1,46645	W=0,64 p=0,00
PYT5_WYZW	1,31	1	3	0,434378	1,90003	2,02501	W=0,50 p=0,00
PYT6_TECH	1,58	1	3	0,355274	0,48520	-0,64757	W=0,73 p=0,00
PYT7_ZMIANY	1,30	1	3	0,234975	0,82118	-0,98961	W=0,61 p=0,00
PYT8_ZADDOM	1,58	1	2	0,244478	-0,33538	-1,90659	W=0,63 p=0,00
PYT9_OCEN	1,62	1	2	0,236318	-0,50652	-1,76106	W=0,61 p=0,00
PYT10_DOST	1,32	1	2	0,219900	0,76084	-1,43551	W=0,59 p=0,00

PYT11_GAME	1,90	1	2	0,090050	-2,69607	5,32166	W=0,34 p=0,00

source: own work based on research

Summary

The study revealed that the general perception of the Polish education system among respondents is rather critical. Participants rated the state of the education system at a relatively low level, indicating widespread dissatisfaction with current solutions and educational methods. Such an assessment may suggest significant shortcomings in the system and the need for deep reforms. Opinions about the educational reforms since 1989 were divided, reflecting the complexity and diversity of educational experiences in Poland. This also shows how important it is to understand specific social groups and their sentiments when implementing changes.

It is also worth noting that although new technologies are widely recognized as an essential element in any modern educational policy, the opinions of respondents about their use in Polish education were divided, indicating their uneven implementation or inappropriate use. This clearly points to the need for better integration of technology with the teaching process to enhance educational effectiveness and adapt it to the requirements of the contemporary world. Responses also indicate significant issues with equal access to high-quality education. Most respondents believe that equal access is not provided, which poses a challenge for policymakers responsible for Polish educational policy. It should be noted that opinions about the overall reforms of the Polish educational system, carried out since 1989, are divided, however, in larger urban centers, negative opinions prevail.

A very positive reception of the idea of introducing gamification and game-based learning in schools by a significant part of the participants indicates the openness of the surveyed group to innovative teaching methods. This is especially the case as respondents assessed the overall state of Polish educational policy as unsatisfactory. Most of them also believe that Polish schools do not prepare students for life in the modern world, and that the curricula are not consistent with potential future challenges.

Interestingly, a decisive majority of respondents support moving away from traditional homework and grading systems. This may be related to the nationwide social debate, as this topic was frequently discussed in the media during the study. This indicates the need to consider alternative methods of assessment and motivating students to learn.

The results obtained constitute a field for further political and sociological research. They are also an excellent complement to studies that have already taken place, as well as those that will be conducted in the future.

One of the newer materials related to the state of Polish education is an article by Małgorzata Gałecka (2022), which analyzes the efficiency of Polish secondary education from 2011-2018 using econometric techniques. The study emphasizes spatial differences in educational outcomes between cities and the countryside, comparing general education high schools and vocational schools. The total Malmquist productivity index was used to analyze changes in productivity and resource impact, indicating a significant role of technology in contemporary education. Interestingly, the study showed the highest educational productivity in rural vocational schools, where technology was used to a greater extent than in other schools.

Will be bad to overlook the latest PISA (2023) study conducted in 2022. These show that Polish students remain above the OECD average in mathematics, reading, and science, but compared to previous years, there has been a decline in their results. Results in mathematics and reading have returned to levels from 2003, with a higher percentage of students achieving lower levels of competence. The decline is particularly noticeable in vocational schools, which also suggests the need for corrective actions in the educational system.

An article by Anna Sajdak-Burska (2023) analyzes methodological aspects that can be used in building a "modern conservative school". The author uses the category of "duality" to analyze the relationship between conservatism and modern didactics, highlighting the dynamic tension and oscillatory movement between these positions. From this study, it can be concluded that the modern school is exposed to many pitfalls. One of the biggest threats is related to fundamentalism. This in turn shows that pluralism and democracy in school should have greater significance, as they can help combat fundamentalism.

Ewa Tłuczek-Tadla (2022) explored how high school students understand the democratization of education. It turns out that the majority of high school students do not participate in student councils or school boards. 87% of students held no positions. The results suggest that young people value values such as freedom of speech, but this is not reflected in their real participation in school management. Lack of engagement may result from many reasons, which provide an excellent field for further research.

The results of the conducted study, like the studies described above, clearly indicate the need for deep reforms in Polish educational policy. These should focus on improving the quality of teaching, integrating new technologies, ensuring educational equality, and exploring modern teaching methods, such as gamification and gamification. These actions can contribute to

creating a more just, effective, and modern education system that better responds to future challenges. Furthermore, the study provides an excellent basis for conducting further research, including detailed studies on specific aspects of the educational system or those conducted over a longer period and on a larger group of respondents. In the study, it was not taken into account whether the respondents had children or not, which could potentially have influenced its results.

Bibliography

- Auleytner, J. (2004). *Polska polityka społeczna. Ciągłość i zmiany*. Warszawa: Wydawnictwo Wyższej Szkoły Pedagogicznej TWP.
- Bäcker, R. i inni. (2016). *Metodologia badań politologicznych*. Warszawa: Polskie Towarzystwo Nauk Politycznych.
- Ball, S. (2021). *The education debate: Policy and politics in the twenty-first century*. Bristol: Policy&Politics.
- Chodubski, A. (2009). *Metodologia jako szczególna wartość badań politologicznych*. Studia Gdańskie. Wizje i rzeczywistość, 6, 90-101.
- Ciepielewska-Kowalik, A. (2022). *Obywatelska polityka edukacyjna. Koprodukcja i współtworzenie*. Kraków: Zakład Wydawniczy NOMOS.
- Ciupka, S. (2016). Szkoła a kształtowanie kompetencji moralnych. w: *Współczesna edukacja. Wielopłaszczyznowość zadań*. Kraków: Wydawnictwo "Libron Filip Lohner", 147-163.
- Dalton, R. (2008). Citizenship Norms and the Expansion of Political Participation. *Political Studies*, 56(1), 76-98.
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. E. (2011). From game design elements to gamefulness: defining "gamification". *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments*. ACM.
- Gałecka, M. (2022). Produktywność polskiego szkolnictwa średniego. *Optimum. Studia Ekonomiczne*, 107(1), 127-141.
- Huotari, K., & Hamari, J. (2012). Defining gamification: a service marketing perspective. *Proceedings of the 16th International Academic MindTrek Conference (MindTrek '12)*. ACM, New York, NY, USA, 17-22.

- Ikonowicz, P. (2012). Jak żyć Panie Premierze? Diagnoza kryzysu społecznego w Polsce. Wrocław: Ruch Palikota.

- Illeris, K. (2015). Transformative learning and identity. *Journal of Transformative Education*, 12(2), 148-163.

- Jakubowski, M. (2021). Polityka edukacyjna. w: *Polityki publiczne* (pp. 153-174). Kraków: Wydawnictwo Naukowe Akademii Ignatianum w Krakowie.

- Kurzyna-Chmiel, D. (2013). *Podstawy prawne i organizacyjne oświaty*. Warszawa: Wolters Kluwer.

- Kuhlthau, C. C., Maniotes, L. K., & Caspari, A. K. (2007). *Guided Inquiry: Learning in the 21st Century*. Libraries Unlimited.

- Kwasek, A. (2018). Wyzwania współczesnej edukacji w kontekście zmian technologicznych i społecznych. *KNUV*, 2 (56), 203-216.

- Nesterok. (2024). *To my jesteśmy pokoleniem zmian!*. dostęp: https://onsen.eu/blog-o-spaniu/pokolenie-zmian

- Niezgoda, M. (2011). Jak patrzeć na zmianę edukacyjną w Polsce. w: *Społeczne skutki zmiany oświatowej w Polsce*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

- *Organisation for Economic Co-operation and Development*. (2023) OECD PISA 2022 results.

- Podoski, K., Turnowiecki, W. (2001). Polityka społeczna. Gdańsk: Wydawnictwo Uniwersytetu Gdańskiego.

- Sadura, P. (2013). Marzy mi się rozmowa o innej szkole. w: *Edukacja. Przewodnik Krytyki Politycznej*. Warszawa: Wydawnictwo Krytyki Politycznej.

- Sajdak-Burska, A. (2023). Konserwatyzm i nowoczesność w edukacji. Dwoistość – otwarcie – pułapki. *Polska Myśl Pedagogiczna*, 9(1), 61-81.

- Tłuczek-Tadla, E. (2022). Demokratyzacja edukacji w liceach – jak ją rozumieją uczniowie?. *Kultura - Przemiany - Edukacja*, 11, 82-104.

- Trilling, B., & Fadel, C. (2009). 21st Century Skills: Learning for Life in Our Times. Journal of Curriculum Studies, 41(2), 265-267.

- Wołoszyn, S. (2003). *Wychowanie i „nauczanie" w cywilizacjach starożytnego Wschodu*. Pedagogika, Warszawa: Wydawnictwo Naukowe PWN.