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**On experiencing learning in an (un)known space ...
Review of a book by Lidia Bieliniś
„Uczenie się w przestrzeniach cyfrowych Uniwersytetu”**

**O doświadczaniu nauki w (nie)znanej przestrzeni... Recenzja książki
Lidii Bieliniś „Uczenie się w przestrzeniach cyfrowych Uniwersytetu**

Abstract: A book „Uczenie się w przestrzeniach cyfrowych uniwersytetu. Studium teoretyczno-empiryczne” by Lidia Bieliniś deserves recommendation for at least two reasons. Firstly, it constitutes a rich collection of content on technological enhancement of the process of learning in educational models addressing the challenges of contemporary world dominated by digital and social media. Secondly, it is a source of valuable reflections and observations from an innovative research project completed during academic classes and devoted to students’ experience of learning using modern technologies. The contents and message of the book is an invitation to a discussion and reflection on methods of teaching which today can be provided with the use of digital space, not only on university level.

Keywords: digital space, learning, teacher, student, university.

The book „Uczenie się w przestrzeniach cyfrowych uniwersytetu. Studium teoretyczno-empiryczne” by Lidia Bieliniś (2022, pp. 335) published by Oficyna Wydawnicza “Impuls” publishing house and referred to in the title of this review is worthwhile both for cognitive and formal reasons.

Substantive contents of this monograph are a perfect source of inspiration when considering modern forms of academic teaching which is

also inscribed in the Polish pedagogical discourse of the last few decades as regards the chances, threats, and possibilities of using modern technologies in broadly understood education, within the processes of teaching and learning.

Although – as we can read in the biographical note – the Author represents Educational Sciences, the theoretical and research explications which she pursues place the reviewed publication on the verge of at least a few disciplines, including pedagogy, andragogy, sociology, psychology or media studies which, undoubtedly, not only increases the substantive value of the study, but also extends the scope of audience interested therein.

First, this book is addressed to pedagogical environment engaged in the didactic process and seeking modern, creative methodological solutions both when working with children and teenagers as well as university students who the Author refers to in her study as “young adults”, in accordance with the typology proposed by the development psychology (Strelau, 2000, p. 317-320).

The general character of issues discussed in the book goes beyond the scope of digital technologies in teaching or learning processes and opens an important discussion on the changes taking place in Polish education. In the light of the above, psychologists, sociologists, educational politicians, and finally students of teaching faculties should also be interested in this publication, because the awareness of the role of digital technologies in the educational processes and the knowledge of how to use them effectively in educational practice constitutes an inherent element of designing didactic and educational work with students as well as a tool for improving each teacher's own methodology.

In the context of contemporary academic didactics „Uczenie się w przestrzeniach cyfrowych...” may be considered as a valuable theoretical and empirical study which constitutes an important contribution to contemporary pedagogy allowing better understanding of changes occurring in the area of learning in the educational context which is undergoing transformation under the influence of modern digital and media technologies.

There is no denying that modern technologies have become not only present, but in fact almost predominant in all spheres of human life. The vision of the world as a “global village” (McLuhan, 2019, p. 21-32) created in the 1960s where thanks to the development of modern forms of communication and mass media, the time and space boundaries are non-existent, and each man has unlimited access to information (knowledge) has become a fact. Growing digitalization and medialization of human world can be observed in the evolution of the society which, in the last decades, moved

from industrial forms, through post-industrial, consumer and mass forms and now has become an information society, where information obtained, processed, and disseminated with the use of modern technologies has become the highest value.

Thanks to dynamically developing digital and media technologies, right by the real world, where we exist biologically, there exist alternative virtual worlds full of cyber-communities and cyber-societies set in various cyberspaces. Therefore, it should not be surprising that modern digital technologies have entered the area of broadly understood education, covering within their scope both the process of teaching and learning. The first attempts to adapt them to the area of education system were made in the early 1900s, however, when the technologies gradually transformed from information-communication ones to “technologies of knowledge” (Kaware and Sain, 2015, p. 25-27), their role and meaning in education, also in academic education, have become more and more significant (Cox, 2012, p. 86).

In the Polish context, the process of implementing technological achievements into the educational processes has been progressing much more slowly than in the case of international tendencies shaped by the policy of educational changes especially visible in the United States or Great Britain. The Author of the book reasonably sees the reasons for this “delay” in the historical and social context of Poland, the necessity to rebuild the society and infrastructure destroyed because of WWII, or subsequent long-term influence of Communist ideology (Bielinis, 2022, p. 27). Another reason, which needs to be mentioned here, is the policy of introducing reforms to the education system in democratic Poland, which has been analyzed with great insight by Bogusław Śliwerski in an outstanding study „Uwolnić szkołę od systemu klasowo-lekcyjnego” (Śliwerski and Paluch, 2021, pp. 356), which may be referred to as the “policy of missed opportunities”.

A turning point for the manner of seeing the role and significance of modern technologies and digital media in the Polish education system was the outbreak of COVID-19 pandemic and the ensuing “emergency” relocation of the so-far traditionally pursued forms of education to cyberspace (distance learning), which also included university education. In global scale, distance learning on the level of higher education is not a new phenomenon and it has been functioning in universities for over fifty years (Czapiewska, 2021, p. 52), however, only in 2020 our educational system faced for the first time various problems as regards decision-making, organization and broadly understood education in practice resulting from the application of the “new form” of didactics to educational academic practice (Kobyłarek, 2020, p. 8-9).

The above-mentioned circumstances have become an issue both for theoreticians and for researchers examining educational reality who present their reflections, observations and recommendations in scientific articles, multi-author monographs, compact publications and research reports covering within their scope all stages of education (Buchner, Majchrzak, Szeniawska and Wierzbicka, 2020; Chodkowska, Kazanowski, Parchomiuk and Szabala, 2021; Pyżalski and Walter, 2021).

With no prejudice to the substantive value of the aforementioned studies where we can certainly find conclusions and guidelines valuable both for the theory and the practice of teaching using modern technologies and digital media, it needs to be emphasized that the inspiration for the book „Uczenie się w cyfrowych przestrzeniach...” was a very thorough (dating from times much earlier than the outbreak of COVID-19) scientific interest of Lidia Bielinis in the phenomenon of learning of adults with active use of resources available in digital space as well as an attempt made by a young academic teacher to look for ways to work with students which would be useful from the point of view of their learning (Bielinis, 2022, p. 301.)

The reviewed publication is divided into three parts: theoretical, methodological and empirical. Apart from the introduction, six chapters, conclusion and bibliography including an impressive number of sources both in Polish and in other languages, the Author also presents an extensive collection of photographs, images and tables, which – on the one hand – reinforces the visual presentation of discussed issues and – on the other hand – organizes the presented material promoting better interpretation.

The theoretical part consisting of two chapters constitutes a kind of introduction to the world of digital technologies, its values, overt and covert symbolic representation as well as a specific ethos prevailing in the digital space.

In the first chapter the Author discusses the fundamental issues of media evolution, starting from their first traditional forms, through information and communication technologies present in educational models, to the most recent social media.

The second chapter is devoted to familiarizing the reader with the field of exploration, i.e. the digital space and to presenting a characterization of didactic models in digital age which include new concepts such as generativism, connectivism, and theories of transformative learning to the pedagogical discourse recognizing behaviorism, cognitivism and constructivism as theories describing the process of learning.

In the theoretical part of the publication the reader can also find a generation differentiation of the society which is worth mentioning here. The differentiation refers not only to age but also directly to the level of knowledge and skills of using modern technologies by members of particular groups (“digital immigrants”, “digital natives”, “generation C”, “Net generation”, “generation Z” or “the App Generation”), as well as an interesting definition of “digital space” which Lidia Bielinis proposes to see as „a space where the most important activity is creating virtual communities in social media where learning can take place” (Bielinis, 2022, p. 60).

The author’s conceptualization of the concept deserves special recognition, because in the literature on the subject there is no unambiguous definition, and in some studies the terms “virtual reality” or “cyberspace” are used as synonyms for “digital space” (Tanaś, 2015).

In the second part, which comprises one chapter devoted in full to methodological assumptions, Bielinis presents her own original and interesting research project, the aim of which is answering a question: how do young adults experience digital space in the process of learning? The theoretical framework of the project are the earlier mentioned didactic concepts: generativism, connectivism and the theory of transformative learning. As the purpose of the conducted qualitative research the Author indicates: reconstruction of meanings and senses which young adults give to the process of learning with active use of digital space during academic classes (explorative purpose), understanding and describing the phenomenon of experiencing digital space during university classes by academic students (descriptive purpose) and reconstruction and checking the explanations generated in the process of analysis and interpretation (Bielinis, 2022, p. 137).

The participants of the research project were pedagogy students from the University of Warmia and Mazury who experienced the possibility of learning supported by modern technologies. The future teachers in the process of formal education, participating in academic classes conducted by the Author of the publication, formed educational and discussion groups on Facebook, used computer communication, shared materials via groups on social media, used various information and communication technologies as well as discussed their school and out-of-school experiences connected with digital space.

The Author applied participant observation, netnography interviews and document examination when collecting empirical data and descriptive and theoretical method of data analysis to analyze them. The research project was set in the constructivist trend. Particularly noteworthy here is the

sub-section “Paradigm” which constitutes a substantially reliable and brilliantly presented overview of research models and traditions using ordering charts and comparative lists (Bielinis, 2022, p. 139-152).

The third part of the book entitled „Uczenie się w przestrzeniach cyfrowych uniwersytetu – studium empiryczne”, is a coherent methodological part. It consists of two chapters where – in consistently pursued and well-organized narration – the Author answers the initially raised research questions: How do young adults experience situations connected with using cyber space at university courses? Which of them do they find valuable from the point of view of learning? How do young adults experience forming educational and discussion groups in social media and how do they see the potential of these groups? What does computer communication bring to the process of learning? Which possibilities available in digital space trigger learning? How, when, and where (using what) does the process of learning take place in the case of young adults? (Bielinis, 2022, p. 138).

The statements of examined students, analyzed from the temporal perspective, show that their possibility to experience learning processes in digital space in the educational periods preceding university studies was limited. The reasons for the absence of digital space or very rare instances of using modern technologies and digital media during classes at school can be explained, on the one hand, by insufficient equipment at schools as far as multimedia equipment is concerned as well as by limited access to modern technologies. Whereas such interpretation is true, it should also be remembered that past educational experiences of students participating in the research project in question refer to a period between 2001 and 2012, whereas as early as in the 1990s core curriculum of reformed Polish school system included postulates that modern technologies and media education be included in the broadly understood educational process (Strykowski, 1999, p. 134-137). Moreover, when Poland joined the European Union (in 2004) we gained access to EU subventions, including unprecedented funds granted in the years 2007-2013 for priority investments in the development of modern education sector (Lejczyk, Poździk, 2010, p. 169).

In the period mentioned above also native pedagogical thought, in accordance with the challenges of contemporary times, made attempts to approach current research tendencies in the world of modern technology. The analyzed issues included how the media works and ways of communicating with the use thereof (Goblan-Klas, 2005), the role of modern media in the process of education and upbringing (Gajda, 2005), as well as their influence on the world of cultural and social values (Lepa, 2000). In the light of the

above circumstances, lack of digital space in the pursued didactic processes may be a consequence of the stereotypical approach to education prevailing in Poland, giving primacy to Herbert's vision of school and directive forms of organization of the educational process, which at the same time depreciate the student limiting his role to following teacher's instructions. From this perspective, the Author rightly refers to school entrenched in the memories of students participating in the study as "analog" school.

Social media is an environment which students – being members of a young generation using modern technologies every day – know very well. Introducing the possibility to use them during academic classes, as the Author emphasizes, enabled „casual nature of internal relations and contacts within students' community”, as well as promoted „trust between students and their academic teacher” (Bielinis, 2022, p. 308).

Therefore, it should not come as a surprise that the educational and discussion group created in cyber space supported communication and information flow between classes participants and promoted integration between members of the newly established student team. More in-depth analyses allowed to establish that such experience of cyber space promotes implementation of the theory of transformative learning which sees the process of learning as a transformation in an individual manner of perception and interpretation of oneself and the world thanks to critical reflection on the aforesaid perception and interpretation (Chmielecka, 2019, p. 10). A sort of catalyst for the aforesaid transformation turns out to be a disorientation dilemma which appears when a learning person starts to experience meanings which are completely new to him. Among the disorientation dilemmas of the examined students Bielinis mentions: the establishment of the educational and discussion group itself, as well as maintaining the relationship and communication between students and the lecturer via this group. New experience gained in cyber space allowed students to change the manner they had so far seen their relationship with their academic teacher, which – from the master-students pattern – changed into relations based on partnership. Consequently, there was „more willingness to participate in education and discussion group tackling topics connected with the subject in relation to which we met at the university” (Bielinis, 2022, p. 304).

These observations are valuable for the academic practice: effective communication and mutual trust on the level of lecturer – students relationship promotes the increase of effectiveness both of the process teaching and learning (Covey, 2014, p. 66-75). In the times of information technology, it

can also visibly reinforce the authority of a teacher (Łukasiewicz-Wieleba, 2017, p. 201-204).

Moreover, experiences of students participating in the research project which are described in the empirical part of the book showed that providing “young adults” with didactic materials in the form of digital files in the library of the educational and discussion group effectively supports the process of their individual learning, motivates students to be active in the field of education, optimizes the time devoted to preparation for classes thanks to which – as the Author of the book highlights – „a person may become their own manager of learning – managing time, space and materials which they use in the process of generating new knowledge” (Bielinis, 2022, p. 13).

This is a good example of how the earlier evoked theory of generative learning - which

is „considerably different from the traditional adaptive learning known from most schools. It is focused on generating new, own, individual ways of understanding information produced by the society, especially those made public by social media” (Klichowski 2017, p. 38).

The analysis of the discourse of the examined students shows that the students feel the need to cooperate and that they see the advantages of gaining access to the opinions, ideas and observations of other participants of academic classes within the process of constructing knowledge and learning. The example presented by the Author of “young adults” participating in an educational and discussion group and their cooperation when creating a mind map is an example of implementation of one of the principles of connectivism which states that „learning and knowledge rely on diversity of opinions, i.e. they grow out of juxtaposing information from different sources, originating from different persons, e.g. knowledge gained during on-line courses, from knowledge bases, contacts with a teacher, expert or a social group” (Baum, 2017, p. 222).

The above observations are only some examples of abundant conclusions reached within the research procedure presented in the reviewed publication. I will not quote any more of them in order not to spoil the cognitive interest of readers and to allow each reader to individually see the process of experiencing learning in the perspective of digital space as proposed by the Author of the book.

A significant advantage of the reviewed publication is a lack of instructions, ready-made “recipes” or attempts to normalize the presented problems. Methodology presented in the theoretical part of the publication deserves high regard, among others, thanks to originality of adopted

academic solutions, avoiding easy conclusions or unambiguous determinations, or – last but not least – thanks to the creative involvement of the Author and her erudition visible in her consistent and interesting narrative.

The academic significance of this publication results from its several features which should be mentioned here. First of all, topicality and adequacy of issues tackled by Lidia Bielinis in the light of current and future dilemmas and challenges which higher education faces. The world of virtual education will stay with us for longer and modern technologies have been inscribed in the educational practice of institutions of higher education on permanent basis (Grzyb and Ziółkowska, 2023, p. 3-35), so the reviewed publication shall not lose relevance either contents or message-wise. Second of all, the innovation of the reviewed publication, as – although the subject matter discussed by the Author can be recognized in source literature (Klichowski, 2017; Pazderska, 2017) – it has not been sufficiently analyzed, whereas the methodological concept – in the light of the so-far scarce empirical analysis (Bednarska, 2015; Forsey and Page, 2018) – should be considered as undoubtedly pioneering and worthy of the highest praise. Thirdly, its prospective-ness and usefulness – although the case study used in the research scheme serves to build singular theories, so the conclusions from the analysis of the empirical data presented in the publication are not of general nature and should not be referred to a broader population than the population under study (Rubacha, 2016, p. 333), which the Author is aware of (Bielinis, 2022, p. 301), they may nevertheless serve as a source of valuable inspiration and reflection (Konarzewski, 2000, p. 82) when considering current academic didactics and constructing its assumptions in the future.

The publication ends with a list of practical guidelines for designing classes with adults. Although the Author reserves that these guidelines result from a study limited in time, place, space, and context, she also expresses hope that the suggestions tackled therein may constitute for academic teachers „a source of inspiration for reflexive analysis of educational programs in Polish academic units” (Bielinis, 2022, p. 306). As an academic teacher, when preparing this review, I sincerely share this hope with the Author.

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