



Article

The Polak Game and the Futures of Education – Are University Students Optimists or Pessimists about the Future of Education?

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Abstract

The Polak Game is a tool developed by Peter Hayward (2017) and the research method based on his seminal work “The Image of the Future” (1961). This research is focused on understanding how the futures of education is perceived among current students (future teachers) and psychologists in Serbia and Croatia, through their participation in the Polak Game. The sample consisted of 104 students (58 from Serbia and 46 from Croatia). The results showed that pessimistic views of the educational future are very common in university students (48% chose lower, essence-pessimism quadrants in both countries, with Croatian students appearing to be more optimistic), and the influence-optimism was more frequent (92,3%). This suggests that students, despite their essence-pessimism/optimism tend to have an optimistic view about their own influence on the future of education. The Polak Game seems to be a promising tool both to investigate and venture into opinions on and attitudes to their own future and the future of education in university students. Using causal layered analysis, the Polak Game can help us shift and understand a change from deeper levels.

Keywords

Futures of education, Polak Game, University students, Agency, Optimism, Pessimism

Introduction

“In a world of continuous change, fostering futures thinking in the education system has been recognized as a preferred and effective outcome to transform the current factory learning orientation into a culture of foresight.” (Chen, & Hsu, 2020,103).

We often define the notion of the near or distant future in relation to our lifespan. The future is also a dimension that we think about in the present, with the goal of achieving a better and more desirable future for ourselves. Therefore, an analysis of the present becomes an important instrument in the attempt to create an adequate and better future and provides an opportunity to prepare individuals for what lies ahead. Malhotra et al. (2014) argue that from today’s perspective, the future is deemed more complex and difficult to predict than ever before, but nowadays people have a tremendous need to know what awaits them (Dubovicki, 2017).

While futurists methodologically focus on creating alternative futures, as a group they tend to emphasize the importance of focusing on a desirable, positive, and sustainable future, and not just observing the development towards any future (Dubovicki, 2020; Inayatullah,1996.). The preferred future is thus critical after the alternatives are analyzed. Worldwide, the research on future positive orientations is mainly investigated from a psychological perspective (Ahvenharju, Minkkinen, & Lalot, 2018; Seginer, 2009), and the presence of such research in the field of pedagogy and didactics is almost invisible, which is something Dubovicki (2022, 2020, 2019a, 2019b, 2017) has warned about on several occasions. Singh & Yadav (2017) note that educational strategists could learn from futurists and explore the future in terms of developing different perspectives for planning future trends and educational issues.

Wildman & Inayatullah (1996) stated that it is not just alternative futures that are important, but worldviews and ways of knowing underneath these futures. To create alternative educational futures, multiple ways of knowing are

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needed. Suzić (2012) emphasizes the importance and role of futures studies in future education strategies in Bosnia and Herzegovina. Affirming storytelling as a tool for education and the future, Milojević & Izgarjan (2014) attempted to initiate Futures Studies in Serbia, particularly narrative foresight, where a change emerges not from changing the superficial – new technologies – but from changing the stories we tell about ourselves.

Inayatullah (2020) expounds on the complexity of this phenomenon, emphasizing insufficient harmony between the imagined future and the weight of the past. Causal Layered Analysis (CLA) is one of the methods that can facilitate this process and move towards depth perceptions of change. It deconstructs and reconstructs the future (Inayatullah, 1998, 2017, 2020; Inayatullah, & Milojević, 2015). It can be used to challenge assumptions about the future and then create an alternative of more preferred futures.

While there are studies where futures studies methods were theoretically and empirically evaluated within the context of education (e.g. Dubovicki, 2020, 2019a, 2017; Suzić, 2012; Dubovicki, & Beara, 2020; Chen, & Hsu, 2020), to the best of our knowledge, there are no similar studies with the Polak Game performed in the context of initial education of teachers and psychologists. Therefore, this study aims to fill in some currently existing research gaps. Specifically, its goals are to map, and then investigate how the students perceive the future of education, using the Polak Game. The Polak Game is a research method based on the seminal work “The Image of the Future” by Fred Polak (1961), which was developed by Peter Hayward (2017).

Theoretical Framework: Educational Futures and the Polak Game

“Is anyone satisfied with the current dominant model of schooling and education? [...] What does the future hold for the current ways how education is commonly understood and practiced?”, asked Milojević in her book *Educational Futures: Dominant and Contesting Visions* (2005). The same questions could be raised today, seventeen years later, which are very likely to have been further exacerbated by the COVID-19 pandemic. It is preferable that young people construct positive futures scenarios (Dubovicki, 2020); hence, all the activities and steps taken in this study will be a move forward towards the set goal.

More recently, Chen & Hsu (2020, 103) raised the issue of the importance of the culture of foresight in the education system. Specifically, they argue that there is “a lack of quantitative research on the measurable outcomes of futures learning [...] discouraging its development in the community of higher education.” Indeed, while a number of studies analyzed positive and negative scenarios of the future – “future imaginaries” – from various aspects and fields (philosophy, theology, sociology, economy, political sciences, history and anthropology), there is still very little research concerned with a deeper analysis of the “perspectives on the future” from the standpoints of pedagogy, didactics, and educational psychology. Notwithstanding UNESCO’s efforts in the area of futures literacy and futures labs and similar initiatives undertaken worldwide by concerned educators, futures in education remains largely “tacit, token and taken for granted” (Gough, 1990).

This is particularly problematic nowadays. More recent situation with education worldwide is far from “regular”. Digital teaching and learning – long proclaimed as “the future of education” – has finally been implemented on a large scale. In the context where classical teaching/learning interactions in physical classrooms are not default location and ways of learning, online teaching and learning are becoming more and more prevalent in education. Even though educational futurists have been anticipating such a massive shift for decades, educational institutions in Serbia and Croatia were relatively slow to respond until the COVID-19 pandemic, when it all happened “overnight” and became a “new normal” (Beara, Rakić-Bajić, & Hinić, 2022). Systems, as well as teachers and students, are struggling to adjust to “the new normal”. In addition to the issues arising from the COVID-19 pandemic, education in Serbia and Croatia, as in many other countries, had other shortcomings and challenges even before the pandemic. These include a transition from the “pedagogy of truth” to the “pedagogy of existence” and job market expectations; a transition from content-based to outcomes-based teaching/learning; technological development in educational resources that are not equally accessible to all; marking and grading that has become non-reliant representations of the real achievement of students, among others. Many of these issues are still a “work in progress” and have been magnified during the pandemic. Unfortunately, both educational and social issues have been greatly undermining student optimism towards the future lately. Findings indicate that students believe they have a low level of agency to initiate their desired futures, although they are confident that technology has the power to achieve them (Dubovicki, 2020; Hoffman, 2019). Oyaid (2009) emphasizes that the current role of a teacher is

not suitable for the future. Present university students have gone through many educational reforms and transitions during their primary and secondary education, and they are still a part of the education systems at their universities. However, they will soon become teachers and school psychologists, thereby shaping educational and social futures. Therefore, it is of great importance to investigate how they perceive the new “tomorrow” and their own role in it. It is thus critical to analyze the ways in which their experiences of their own education shape their vision of educational futures. Furthermore, it is imperative to find approaches focused on boosting their optimism – given its significance for a vibrant society and thriving economy, as argued by Polak and other authors. Accordingly, essence optimism with agency is the crucial variable in creating successful futures.

Academic optimism is one of the factors that has consistently been proven to shape teachers’ success in teaching and have a favourable impact on society (Beard, Hoy & Hoy, 2010; Hoy et al, in Kurz, 2006). According to Mikolaycuk (2004, in Luczynski, 2016), education based on optimism entails instilling in a young person a relatively lasting tendency to perceive, explain and assess the world and the occurring events as being positive rather than negative, and developing in them a tendency to expect favourable events rather than unfavourable.

In other words, academic optimism is a teacher’s belief that they can teach effectively, that their students can learn, and their parents will support them, so that teachers can set high academic expectations for their students (Beard et al., 2010; Beara 2012). Academic optimism defined in this way can be observed both at the individual and organizational level (when these beliefs become the dominant belief of the school as an organization), and research shows a direct connection between academic optimism and student achievement at the latter level (Hoy, Tarter, & Woolfolk Hoy, 2006, according to Beard et al., 2010).

Crucially, futures methods and foresight in general have been shown to enhance optimism among young people. For example, recent research by Chen & Hsu (2020,113), which evaluated learning outcomes and impacts of futures-oriented education, concluded that:

“Students who have taken futures courses demonstrate statistically significant higher performance in two dimensions of futures thinking, namely transdisciplinary system and openness to alternatives. Additionally, they are more optimistic toward the year 2030.”

Research is also currently needed to better understand foresight in COVID-19 and post-COVID-19 education, the impact of pandemics on the mental health indicators in students (such as optimism and pessimism), as well as the power of futures methodologies in educational contexts. A crisis is also a chance for improvement; an optimistic vision of the future could serve as a protective factor for mental health of individuals and society, along with futures thinking and future-informed strategies that could increase the chances of overcoming crises for the better, not for the worse.

One of the promising futures studies methods for investigating and instigating the change in education futures is the Polak Game (Dubovicki, & Beara, 2020). In short, the Polak Game/Method is conducted in such a way that participants, with the help of a facilitator, use the physical space in which they find themselves to re-examine the assumptions about the future in a simple and generative way and demonstrate their understanding of the future. Negative or positive outcomes in general are positioned on the one hand, and their sense of personal influence in achieving the desired changes, on the other. Differently put, they are invited to position themselves in the “essence-optimism/essence-pessimism” horizontal halves of the room (upper-lower), and then to position themselves within the vertical division into the “influence-optimism” and “influence-pessimism” quadrants. In this way, 2x2 matrix is given, with the like-minded participants positioned in one of the four cells.

As a result of this activity and obtaining four groups of “attitudes” towards the world and opportunities to influence, the facilitator initiates a discussion between the representatives of these four groups, which is the next step. The facilitator first asks the participants to name their position in this game. We will be further discussing this method and the names of the quadrants in the Methodology and Results section.

Methodology

The overall objective of the research is to determine how the futures of education is perceived among current students of education and psychology – future teachers, who represent the future of education themselves, and future mental health professionals who will give students and teachers, among others, support to overcome difficulties. The COVID-19 pandemic brings up additional questions about the perceived future – how the education and mental

health of world nations will look like in a post-pandemic world? As well as what can be done to improve this outlook towards a higher level of optimism?

Research aims and tasks

(1) To determine the percentage of students who choose each of the four quadrants (essence optimism/influence optimism; essence optimism/influence pessimism; essence pessimism/influence optimism; essence pessimism/influence pessimism), through the Polak Game, and how they explain their choice of position.

(2) To determine how students perceive the future of education in Serbia and Croatia, and compare their perceptions.

In relation to these aims and tasks, the following research questions were set:

- Can the Polak Game be used as a tool for investigating students’ perceptions of their professional futures and the future in the field of education?
- How optimistic or pessimistic are the future teachers in Serbia and Croatia about the educational futures in their respective countries, and what is the main reasoning behind their choices?
- What kind of the practical implication for educational futures could be drawn from the results of the Polak Game?

The sample

The sample consisted of N=104 in total, i.e. 58 university students from Serbia (State University of Novi Pazar and University of Kragujevac) and 46 university students from Croatia (Faculty of Education, Josip Juraj Strossmayer University of Osijek). There were 8 male and 95 female students. According to the area of study, they were divided as presented in Table 1.

Table 1: The sample of the research - Study programmes

Study programmes	f	%
Psychology and Philology, Serbia	58	55,77
Education (Primary school teachers), Croatia	46	44,23
Total	104	100

Research Method and Procedure

The Polak Game, specifically incorporated into this study’s procedure, was employed. The students of psychology and teaching study programmes participated in the Polak Game in smaller groups (up to 25 participants; three groups in Serbia and two groups in Croatia), respecting the health measures that were in force at the time of the implementation.

Description of the procedure: Before the workshop, students filled in a short questionnaire about sociodemographic data. After that, they took part in the Polak Game. The game was carried out according to the modified scenario proposed by Hayward, & Candy (2017). The classroom was previously divided by a line on the floor into an upper “optimistic” and a lower “pessimistic” part (essential/expectation optimism/pessimism) and the right/left quadrants (influence optimism/pessimism), as described in Figure 1. These are the quadrants that Hayward & Candy used.

Upper Left – Service Oriented Things are good and getting better; We have to work with larger forces and play our part.	Upper Right – Powerful or Agentic Things are good and getting better; AND we can act to make things even better.
Lower Left – Free, or Que Sera, Sera Things are getting worse; There is nothing I can do about it. I cannot make things worse, so I am free of the responsibility of trying to do it.	Lower Right – Realistic, or Stoic Things are getting worse generally; But I can act to make a difference here and now, in this place. It may not change the future, but it is still worthwhile.

Fig. 1: Modified Responses within the Quadrants (Hayward, & Candy, 2017, 8)

The students positioned themselves in these quadrants according to their vision of the future. During the implementation of the Polak Game, students could walk from quadrant to quadrant until, they kept their final positions in the last stage, which are presented in this paper. A short discussion on their positions followed, which was voice recorded with the participants’ permission.

Research results and interpretation

During the workshop with the Polak Game, the students positioned themselves as given in Table 2.

Table 2: Number and percent of the students in the Polak matrix

1. Psychology students, Serbia (N=58)

Upper left (Service-oriented): 2 (3.45%)	Upper right (Powerful or Agentic): 21 (36.21%)
Lower left (Free, or Que Sera, Sera): 6 (10.34%)	Lower right (Realistic or Stoic): 29 (50%)

As could be seen from the table, the majority of the students (over 60%) chose essence– pessimistic viewpoint, while 39.6% chose essence optimism as their opinion of the future of education. We will now present their comments within each of the quadrants.

Free, or Que Sera, Sera quadrant:

The comments that they gave on why they chose their “double pessimistic” (lower left) positions were:

Education in Serbia depends on some higher powers, and many people go abroad because of that. Our diplomas are not worth that much abroad; we study more, but we are not appreciated. As long as there is party-based employment, which is already offered almost on the streets, I think that our education, no matter how good it is, is not valued and has no future. (Student NP, X)

The students recognize low motivation of the teachers and also low teachers’ salaries as a problem. On the one hand, low salaries are the reason for lack of motivation, and on the other, students see that their teachers, knowledgeable and with diplomas, are underpaid and they will not be a very attractive role model. If a teacher with all this knowledge of the world barely can make ends meet, it doesn’t seem to me to go any better. (Student NP, Y)

If you have money, you will buy both a diploma and a job. It is a public secret that those who bought

diplomas are in power. (Student NP, Z)

How do I get a student to change their understanding and value of knowledge, when they see all around them the opposite of what I am telling them? The child sees many examples in society, regardless of the fact whether we bring them up and educate in a different way. (Student NP, W)

Education has been better in the past, for example; when I watch a quiz with my parents who are 40 years old, they know more than me about history and geography. (Student KG, A)

Realistic, or Stoic quadrant:

In spite of these essence-pessimistic viewpoints, the majority of students in the lower half stood in the right quadrant (“it’s getting worse, but I can make a difference”). Their typical comments about it were:

There are purchased diplomas, there are non-professional teachers, but I think that learning requires will, that motivation does not have to come from the teacher, but is somehow innate, and that is why I think that a person should start from him/herself. For example, I have a friend who could not enrol university, but she is educating herself, constantly reading something. Learning is inherent in every person. (Student NP, Q)

The situation of online teaching (during COVID-19, note given by the author): if the teacher is committed, it will be of the same quality as live teaching; the same with students: if they work hard online all year round, they will certainly achieve results regardless of the country and politics. (Student NP, A)

We cannot blame political forces because we voted for those political forces; we allow our universities to be like that, e.g. private universities that are not sufficiently controlled; even at a state university we have some protected lecturers who are not doing their job well; pessimism is not good, but still we can change something as individuals. (Student NP, B)

Powerful, or Agentic quadrant:

The comments of the students that chose the optimistic and influence cell (upper right) of the Polak matrix:

As long as there is an individual who wants to change the world, there is hope. (Student NP, C).

Students care about their financial situation, but it is again a matter of the individual, how we teach our children. If we as parents teach the child to be modest and satisfied with what he/she has [...] It is on us to take that path, and how it will eventually be is God’s will. (Student NP, C).

What one brings from home is stronger than society, these motives are strong, but in the first place it is our will to succeed. We neglect the real meaning of success: it is a real success if we are both good people and successful (in profession). (Student NP, D).

The education now is more modern, younger generations are more aware of the importance of higher education. (Student KG, E)

I am confident in my knowledge, I think we have more information than some colleagues who are outside Serbia, I think we know more. (Student KG, F)

The content of some courses has now changed, it is more in line with the new age. Education is much more modern, and more is being invested in it than it was before. (Student KG, G)

Education is particularly specialized in some areas, which is quite good because it is practical, which is a good thing in the current labour market. It is difficult to find a Renaissance man now, and that is what is being done in Serbia now. (Student KG, V)

It's all a matter of the individual, and those professors and everyone who works and learns. Every company, every university has both good and bad individuals. Everyone has the power to do good, and influence the others. (Student KG, F)

There used to be a much worse situation in terms of the financial impact on education; now, availability of education is greater; some of us had modest financial starting points, and yet we reached Year 3 of university. (Student KG, E).

Service – oriented quadrant:

Only two students chose the upper-left position, and their points of view were as follows:

In general, I think that education is better than before, the content is more adapted to the application of knowledge and children themselves. (Student NP, I)

Corruption: we can protest and fight, but corruption is widespread and that is why I have taken this position; these corrupt people have a stronger power than the will of the individual is. (Student NP, H).

In those comments we can see that the students stressed the current problems and issues as a basis for their pessimistic outlook of the educational futures: (political) party-based employment, unfavourable social circumstances, such as corruption, low teachers' salaries, and investments in the education, purchasing diplomas, and the like. On the other hand, for the optimistic outlook of the future, they appear to be informed about some improvements that they experienced during their schooling and are hopeful that those improvements will last in the future.

Table 3: Number and percent of the students in the Polak matrix

2. Teaching students, Faculty of Education, Croatia (N= 46)

Upper left (Service-oriented): 0	Upper right (Powerful or Agentic): 31 (67.39%)
Lower left (Free, or Que Sera, Sera): 0	Lower right (Realistic or Stoic): 15 (31.61%)

Judging from the figures in Table 3, we can notice that all students (N=46) were divided into only two parts of the quadrant: the upper right and lower right. During the performance of the Polak Game, the students moved from a quadrant to quadrant, but their last position in space is shown here.

Powerful or Agentic:

Most students (67.4%) chose the upper right quadrant – things are good and getting better; we can act to make things even better (essential optimism). 32.6% of the students are in the domain of pessimistic views, combined with influence.

As an explanation of this view, some of the most common answers going in the direction of positive views are given below:

Distance learning, which we were exposed to, showed that nothing could replace a teacher. Especially if we talk about its upbringing impact. The future of education will be positive only if we all accept the responsibility and not shift the responsibility onto somebody else. (Student OS, W)

Looking back, we can see that the teacher has always had an important place in society. In some countries, teachers are still higher up on the social ladder. That says a lot about their importance and irreplaceability. (Student OS, X)

The future of education is precisely in the hands of teachers at all levels of education. And technology is there just to make that journey easier for us. (Student OS, Y)

Realistic, or Stoic:

In support of this view, here are some of the most common answers going in the direction of pessimistic views:

In the future, we may be replaced by robots or holograms. We have witnessed in the time of COVID-19 how classes can also be held online, and some professors have even recorded their lectures. I'm afraid what it will look like in the future. (Student OS, Z)

In the future, there will be a big difference between the rich and poor. The rich will have access to education, clean water and food. Medicine will advance so much that the rich will be able to prolong their lives even more. Here we come to the question of the education of the Third Age (which will now be considerably longer). (Student OS, Q)

There are similar views on the future of other professions. Family doctors think similarly about their profession. Much like future teachers, they imagine that in the future they will be replaced by virtual doctors with the help of unprecedented technological ventures (Dubovicki, Jukić, & Topolovčan, 2022; Dubovicki, 2020; Inayatullah, 2020). For example, Inayatullah working with medical practitioners has developed four scenarios on the futures of health. In three of the scenarios, technology plays a significant, disruptive role.

- Star Trek medicine, wherein physicians use handheld devices for all diagnoses and most treatment;
- Multi-door medicine, wherein doctors are the gatekeepers of different evidence-based traditions, with the primary role to listen and direct patients to the appropriate door – whether it be meditation, gene therapy, surgery, dietary changes or other;
- Corporatization, wherein local doctors sell their practices for the safety and regular income of working for a large provider;
- Virtual doctors, where patients are able to send their holograms anywhere in the world to heal.

In terms of education, more important than technology per se is the role of learning and the ability to influence the future role of learning and the teacher, as suggested above.

The following figure shows the tension between educational strategies. It suggests that technical solutions are focused on merely introducing computers, while the strategies focused on changing not just the technology but also how we learn, when we learn, and our core identities are far more preferred. (Inayatullah, 2020).

	Used future	Understanding the changing environment	Creating alternative futures	Vision and preferred future
Litany	Rules are being broken	A computer for every child leads to the knowledge revolution	New technologies designed into the curriculum	Technologies plus pedagogy plus the social
Systemic problems and solutions	Control the use of new technologies	Funding for computers, but not for support or pedagogy	Workshops for teachers on new technologies and learning	Technology as pedagogical experiments
Worldviews that define the policy	Industrial and parental	Technocratic	Humanistic	An ecology of learning
Metaphors	I'm in change	Technology is the silver bullet	Teachers make the difference	We are all learners

Fig. 2: Educational futures at the four levels using the Causal Layered Analysis model (adapted from Inayatullah, 2015)

To move towards the preferred, it appears that it requires a shift towards powerful and agentic i.e. the future can be better, and we can make a change, as opposed to merely acquiring new technologies. Inayatullah suggests in the above figure, that it is technology plus all stakeholders working on changing their core views on the ability to influence the future. While this is beyond the scope of our paper, further research that links CLA and the Polak game would be instructive, that is, the quadrants are differing worldviews within a CLA framework.

These worldviews are self-referential, and thus Hayward & Candy (2017) proposed that the participants should self-name their positions in the quadrants and offered titles in their paper. Razzeti (2020) proposed somewhat different titles. We asked our students to do the same. The comparison with Hayward and Candy and Razzeti original titles are shown in Table 4.

Table 4: Self-descriptions of the quadrants – comparison with Hayward & Candy and Razzeti

	Hayward & Candy (2017)	Razzeti (2020)	Our sample (2022)
Upper Right (UR)	Powerful, or Agentic	Powerful	Individual changes the world; We have the power
Upper Left (UL)	Service-oriented	Passive	Positive realism
Lower Right (LR)	Realistic, or Stoic	Realistic	Realistic, Optimistic-pessimists, Reasonable
Lower Left (LL)	Free, or Que Sera Sera	Powerless	Reality, Pessimistic-pessimists

As an answer to our first research question, we can conclude that the Polak Game is an important tool (Razzetti, 2020) both to investigate and instigate opinions about and attitudes to their own future and the future of education in university students. With a semi-structured discussion, and well placed questions, it is possible to use the Polak Game for developing optimistic agency as well.

As for the second question, we can conclude that pessimistic views of the educational future are very frequent in university students in Serbia and Croatia (48% of the participants chose the lower quadrants in both countries), but that the influence of optimism is yet even more frequent. Only eight students from the combined sample chose influence-pessimism as their standpoint, while 96 (92.3%) expressed an optimistic view about human (and their own) influence on the future of education. The educational future in both countries is seen as linear, and both regression and progression are seen by the students in our sample. Those who advocate that progress is taking place are more optimistic in their standpoints in the Polak matrix. Furthermore, there are some differences between Croatian and Serbian students, with the former choosing optimistic standpoints more often.

The third research question regarding the practical implications of the Polak Game to the educational futures would need its further employment and research.

Discussion

In this qualitative research, it is obvious that the students, in envisioning the future as optimistic or pessimistic, are greatly influenced by the current situation and their recent experiences in education, in which they are still deeply immersed, and they see the future as linear and tightly connected with the current state of affairs. Within the CLA framework, the litany of the current events and issues significantly impacts on them. Both progression and regression were reported in their comments: some of them claimed that the education was better in the times of their parents’ schooling (regressive image), and some of them believe that previous educational practices were less

developed. This is not unexpected – futures thinking is often linear, concerned with progress and with the ways how to control the future, and this representation of time is embedded in the Greco-Roman and Judeo-Christian concept of time (Milojević, 2005), which is dominant in this part of the world too.

What is visible from the students' comments is that they are greatly influenced by their perception of their own past and present, and expectations for their own future, whereby their views on the educational futures are at the same time views of their own temporal impression on education (e.g. an optimistic student reaching Year 3 at university, despite a modest financial situation; being pessimistic because their parents knew more than the student in a quiz they were watching together). However, we need to let go of excess baggage – the weight of history that is preventing us from co-creating the desired future – if we want to set out on the journey of creating alternative and preferred futures (Inayatullah, 2020). Inayatullah (ibid.) gives examples of this weight: in most of his futures workshops, the participants saw the education as “rigid” throughout the world: “learning with a particular age cohort, from Year 1 to Year 12, at a particular place, fixed time periods (e.g. from 09:00 to 15:30), a defined curriculum and a culminating exam” (p. 5). With a view to escaping this rigidity, the metaphor shift from “walls – too many bricks” to a “wrecking ball” enabled participants to envision a more creative and innovative education system in one of the workshops (p. 4). A combination of the Polak Game and CLA (especially at the myth and metaphor level) could be a promising way how to let go of the past and the present, in envisioning the futures. The results of the Polak Game in the Croatian context showed slightly different results compared to students from Serbia, the latter being slightly more pessimistic. The results could have been partly influenced by the content of the course in which the Polak Game was conducted, which otherwise deals with creativity (these students attended the course Creativity in university teaching). Within this context, the students were previously introduced to the importance of creative people for the survival and development of society. On the other hand, the importance of connecting teaching approaches and practices with psychological dispositions and individual differences of students was underscored in their Educational Psychology course, which could have provided a context for students to become more aware that it was not always the case in their schooling experience. Other factors, such as political, economic and social circumstances in Serbia and Croatia are most likely exerting their effects as well. By way of illustration, research in Serbia shows that teachers are not indeed satisfied with their salaries and social position, they are less satisfied with their profession in the present and the (imagined) future in comparison to the image they held in the past (Beara, & Jerković, 2015). Teachers' dissatisfaction is also something that the students reported in the current study, as one of the reasons behind their pessimism. Nevertheless, a deeper comparison of these factors would go far beyond the scope of this paper, which could therefore be a direction for further research.

A survey of future teachers (N=193) in the academic year 2017/18 and 2018/19 conducted before the pandemic (Dubovicki, 2020), has shown that university teaching does not educate students for the future but for the present. 92% of the students (N=177) believed that the current university teaching does not educate them for the future. The majority of the participants (N=120) maintained that social circumstances would be negative in the future and the teaching process faced with numerous challenges in the future (as a result of such social circumstances). Finally, the participants provided an even gloomier prognosis for their own (teaching) role in the future, believing that most of them will be replaced by robots (N=172). Suzić (2010) pointed to a similar situation in Bosnia and Herzegovina.

Tafel (1984) also elaborated on the teachers' role in the future. The current research shows that as many as 89% of the students, future teachers, believe that their role in the future will be changed, for instance, by being replaced by some form of artificial intelligence, like robots or holograms. Facer (2018) also pointed out the necessity of conceptualizing educational institutions so as to create a better future, and saw his proposals of teaching as a way to better prepare students for the future in open spaces, as well as help them critically think and shape the desirable future. Comparing these results with the ones obtained in this study, we can say that the situation is changing for the better, at least for these future teachers. Even if the majority of students in Serbia were pessimistic in essence, half of the Polak matrix (the vast majority in Serbia, and all of them in Croatia) chose the position of the agency (influence optimism), unlike some previous studies' reports, which showed that university students do not truly believe in their own agency. As stated above, Hoffman (2019) showed that students did not believe in their own agency to bring about the desired futures in climate change; nevertheless, they were confident in the power of technology towards the same goal. Our results, thus, provide a basis for investing this generation of future educational professionals with optimistic expectations.

Conclusion

We can conclude that the futures studies method could be considered in two contexts: research and teaching. The research context of a modern researcher in the field of education, pedagogy and educational psychology should be reflected in the pluralism of scientific paradigms or a network of paradigms that change the role and focus of researchers from detection, towards changing and influencing the existing conditions (Dubovicki, & Beara, 2020). Teaching possibilities are also discernible: the Polak Game could be used to instigate opinions and attitude formation, the development of communication and argumentation skills, as well as to analyse issues covered in the courses(s) (in our case, courses in Pedagogy, Creative Teaching and Educational Psychology). Some of the ideas that can contribute to a change of the current situation, in terms of the organization and implementation of the teaching process are: more content that would deal with the mentioned issues; creating a number of different scenarios for different challenges that would contribute to coping with new situations in more efficient ways (Dubovicki, 2020).

Based on this study results, we believe that students in Serbia and Croatia are well aware of the advantages and drawbacks of the education system in their respective countries. Therefore, their opinions should be taken into consideration in decision-making processes of the respective educational authorities. In addition, the scientific contribution of this study is visible in the methodological part, where the Polak Game was used as a research method for the first time, especially in the university context and in the region. By using the Polak Game as a research method, it has been once again proven that the qualitative type of methodology is especially important when it comes to investigating phenomena like students' views of the future of education.

Not only that – this method could be used at universities for envisioning the futures scenarios in any field of study or any course, which could enhance creativity and learning motivation and problem-solving in students. We agree with Stuart Candy (Howard, & Candy, 2017) that the Polak Game is “a tool worth keeping, revisiting, and iterating” (p. 9). To be the future you wish to see (Inayatullah, 2022) requires one to understand how they see the future, and what they believe can be changed. This means moving from the litany of the current events to understanding the worldviews and narratives that shape us. The Polak Game can be useful in understanding and accessing these deeper layers of reality, and thus in creating alternative desired futures. It is a critical method in understanding how the position one takes in the Polak Game influences the future one sees as possible. In a dramatically changing world, this is more important than ever.

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