PHILOSOPHY FOR CHILDREN (P4C) IN NON-FORMAL EDUCATION

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Abstract: This study identifies, in the context of contemporary trends, the challenges faced in educating today's teenagers. The postmodern age is characterised by not just moral relativism, but also a high degree of individualisation and changes in communications media, customs and traditions. For several decades, Philosophy for Children (P4C) has pursued objectives aimed at developing, critical, creative and caring thinking. Current conditions in institutional education provide a real opportunity for implementing P4C in non-formal education.

Keywords: Philosophy for Children, critical thinking, value oriented personalities and characteristics, iGen - iGeneration, non-formal education.

1 Introduction

Over the past decades, reforms in education have naturally reflected changing values, value orientations, customs and traditions. Nonetheless, even thirty years after Central Europe underwent major societal and political changes, the same questions are still being asked. Two of them are what the goal of education is and what strategy is most appropriate for future generations. Yet another is how to achieve educational results that would let today's teenagers be truly competitive and have the opportunity for a high-quality, successful and happy life. Besides the problems formal education in Slovakia is encountering, there are also "question marks" about non-formal education. Our research was founded on the argument that both formal and non-formal education should, on one hand, fulfil specific objectives and the roles they play, while on the other hand they should complement each other as they pursue common goals and promote quality education as a whole. Due to the low degree of flexibility and innovative potential in formal education, there has been a shift to some viable non-formal education models and activities. We really see no place Philosophy for Children (P4C) can occupy in formal education, even though it pursues objectives which are an absolute priority for a contemporary "school", namely to develop critical and creative thinking. Our study presents a theoretical anchoring of P4C in the context of educational science and practice, while analysing its potential relative to current educational challenges and presenting an empirical study of how it affects non-formal education.

2 Theoretical anchorage of Philosophy for Children (P4C) in the context of contemporary theory and practice of education

Philosophy has sought since its inception to build knowledge and understanding on different foundations than what had been earlier. The entire history of philosophy is clear proof that innumerable factors can cause a change in thinking. Sometimes a single person's intellect was enough, while on other occasions it was a chain of events that caused a new thought construct to emerge, often leading also to a philosophical concept. Since the late 18th century, however, Western civilisation may have been witnessing the gradual disintegration of major philosophical concepts. The postmodern age even "boasts" the end of great discourse. It is also similarly evident in philosophy's impact on the science of education, where its retreat from former positions is unambiguous. Whether this tendency has contributed to all education science moving in the correct direction is doubtful. So the question arises of how philosophy could be returned to educational sciences and practice? Another question considered by us is whether it would be able to contribute even more to addressing either the tendency earlier mentioned or the phenomena of what philosophy could be the most beneficial for

educational sciences and educational practice. Yet for some, emphasising the benefits might be an obstacle. Nonetheless, our belief is that philosophy would be similarly rejected and shunted aside as has been the case in recent decades (and still today) unless it can "usefully" contribute to educational sciences and practice.

Addressing the impact of philosophy and the possibility to philosophise the phenomena of educational sciences and practice begins with identifying the reasons why educational sciences has shifted away from it. In examining the phenomena of education, Průcha (2000, p. 45) blames educational philosophy's speculative nature and the ambiguity of where it starts off. Other studies could be found whose line of argument aims toward stressing how unnecessary both philosophy and educational philosophy are. It is visibly evident that the problem is particularly educational science's reluctance to accept and take philosophy into account in determining its main course. Often there is a feeling like educational philosophy, together with some other disciplines, only "suffers" among an exclusive circle of those that are modern and progressive. Therefore, it is critical for philosophy (and likewise educational philosophy) to find a fully acceptable way to penetrate into the educational sciences and practice and be able to play a part in contributing toward their development.

One possible way for educational sciences to accept philosophy again and for it to penetrate into educational practices is by exploring the possibilities of applied philosophy. Initially, the suggestion is to explore possible convergence of educational science and applied philosophy because even applied philosophy has yet to fully clarify its positions either in its own science or in relation to other sciences and scientific fields. It would be too hasty to "leap" into applied philosophy as the focal point for educational science with philosophy and then consider the issue to have been resolved and close it.

However, any proposed convergence would not be as simple as it might seem. In many central European countries, applied philosophy has almost no tradition and is rarely studied academically. Yet despite its "lower visibility", applied philosophy's presence can be identified in various forms and areas, endeavouring to meet the demands and expectations of society that classical philosophy in principle fails to address. Philosophy's fields of application are innumerable, ranging from genetics through law, economics, ethics, art and literature to family, human rights and globalisation, while covering educational science, too. Closing the circle, we come to our goal of linking applied philosophy to the issues found in educational sciences and practice. But applied philosophy is more than a chance for the science of education to clarify its starting points. It is also a challenge and an opportunity for philosophy to assert itself in various spheres of our lives.

Philosophy for Children (P4C) as an applied philosophy

Several options are used to identify Philosophy of Children as an alternative to applied philosophy. Several terminologies can be found, such as:

- Philosophy for children
- Philosophy of children
- Philosophy with children
- Philosophy of childhood.

From the aspect of substantive analysis, different understandings of what the philosophy for (of) children entails can be worked out and both "philosophy" and "child" can be examined in different relations.

One of these aspects to be examined is the philosophical exploration of the specifics and particular features found in childhood. In this case, it parallels the typically ontogenetic investigation inherent in psychology. Research of this kind could

be attributable in part to philosophical anthropology and would provide a new aspect alongside conventional psychology. To date, there is no clear stance towards a specific area within philosophy to examine childhood according to philosophy of childhood criteria. Tim Sprod at the University of Tasmania, Australia argues that a better philosophy would probably be worked out if childhood issues were incorporated into philosophical research. Appropriate topics for this type of research would be the following:

- Childhood in the context of rationality and emotionality;
- Childhood autonomy (how a child becomes an autonomous moral being);
- Children and communication;
- Children and morality, etc. (Sprod, 2002)

But opening up the philosophy covering the world of children unleashes another problem; is a child capable of similar philosophical analysis, in other words to reflect on things like an adult? Obviously, this is a rhetorical question since children's philosophises need to be built on different foundations than what is in common practice. Nevertheless, no one denies that a child is not capable of philosophising. The opposite is more likely to be the case. However, adequate conditions need to be achieved and created to be not merely spontaneous, but rather direct philosophising. For example, Krajnik (2002) adopts the attitude taken by existentialist philosopher Karl Jaspers, not seeking the essence of philosophy in a scientifically justified - academic philosophy but instead in spiritual philosophising aimed at revealing and understanding the essence of truth and being. Jaspers believed every child to have the ability to philosophise, but, problematically, most would lose this ability as they grew into adults (Krajnik, 2002). Therefore, it is incumbent to create such a particular approach to Philosophy in Children to take into account all the specificities of childhood necessary to apply it successfully in practice.

What is Philosophy for Children?

The very question of clarifying what Philosophy for Children is could itself be understood as philosophical. Since the dawn of philosophy, it has tried to ask questions and seek the answers to them. All philosophical searches and exploration should be directed toward finding wisdom and the path that leads to it. There have been times when philosophers managed to find the "right" answer, although sometimes it took them a thousand years. Philosophical reflection of human reality and life has raised some questions that often form the essence of philosophical research. What is reality? What is the truth? What is beauty? How can I be sure about what I know? What is correct? These and countless other questions develop philosophical thinking. One of philosophy's oldest disciplines is logic, including non-formal logic, which focuses on critical thinking. However, neither philosophy nor philosophising should be understood solely as a spiritual process. Philosophers most often attempt (and have done so in the past) by training their minds to better know, understand and clarify some phenomena and facts. The primary objective behind P4C is to create in their minds such thoughts to enable them to ask questions and find the answers to them. Even children need to devote themselves to "big questions", where research leads them to develop critical thinking. The classic concept of education requires children to answer pre-formulated questions, not to ask them themselves. Philosophy for Children seeks to change this classic approach.

What is the sense of Philosophy for Children?

To seek the meaning of Philosophy for Children, reducing the question could be the place to start. What point does philosophy have at all? Following up on this response could then direct the issue toward childhood, too. Nonetheless, it is assumed that the previous sections have been able to clarify the subject of research to some extent being not only educational philosophy, but also philosophy itself. When philosophy is understood to be a meta-science, it could be argued that it examines everything, exploring questions of being, cognition, thinking, corporate governance and the world of values. There would be an even broader and more comprehensive view of philosophy if the

issues in applied fields were added to philosophical exploration. It would likely be incredibly difficult to find an area in the world and in our lives that could not be covered with philosophical reflection. It means that philosophy, from the most basic intriguing questions to the most specific ones, is a product of our complicated world and our lives in it. Now take the next step and ask yourself the (original) question of what sense can Philosophy for Children make? The dilemma of whether philosophy can also apply to children growing up was outlined a few lines earlier. Below are a few questions and discussion topics attributable to children:

- I'm wondering whether ghosts are real or not!
- If my dad or mom tells me it's good, what does that even mean?
- Why would someone be my best friend?
- What is fair and what isn't?
- Why does time sometimes seem to fly and at other times drag?
- I think a baby is a real person and not just a thing!
- Mommy told me it wasn't a solid point. What was she thinking?
- My parents asked me to tell the whole truth!
- Where is grandpa now since he recently died?

Even more ideas and questions of a similar nature and content can be cited, but at this stage of the analysis what concerns us the most is whether they form the basis for children to philosophise. A number of philosophers could probably be found that would clearly reject any connection between these questions and philosophical reflection. Yet it can be rooted in the conviction that these ideas and questions are a kind of translation of the "great philosophical issues" into the language and world of children. Why should there be doubts about a child's interest in spirituality and the nature of knowledge? Why is there a belief that they are never thinking why something today may be different tomorrow? Why does something have value for me and not for someone else (or vice versa)? Why? Why? Why? Accepting the meaning of these questions while in most cases confronted with them on a daily basis, whether in a family or school environment, there is no reason to question Philosophy for Children.

3 The present challenges and strategic objectives of nonformal education

Unlike formal education, non-formal education makes it possible and provides the opportunity to plan and implement such educational intentions which have not been so successful in compulsory education. The substantive reforms Slovakia put in place during 2008 were designed through school-based education curricula to give schools much more freedom, liberty and autonomy. These should and could have made a difference in what should and could have resulted in originality between schools. However, eleven years of this (unrealised and unsuccessful) reform has shown schools not to have changed much and formal education remains dictated by rather traditional and rigid goals and practices. Nonetheless, they are not capable of responding to current conditions and challenges because they are still based on the notion and belief that "what worked decades ago still works today is likely to continue working in the future". But (fortunately) this point of view does not exist in non-formal education, nor does it have barriers that would prevent the design and implementation of progressive and pragmatic objectives and methodologies. There have been several reports analysing education and youth in Slovakia. It is enough to remember (Burjan, 2017) Učiace sa Slovensko (Learning Slovakia), a strategic document released in 2017, and the think-tank analyses and initiatives bundled under the title of To dá rozum (It's Common Sense).

A U.S. expert researcher on generational traits who has identified current characteristics in contemporary adolescents, Jean Twenge (2017), calls today's young generation (born after 1995) the iGeneration or iGen. "I" in this case can mean both absolute bonding to the Internet and also an individual and

largely egocentric focus among the generation. She describes an interesting phenomenon, highly debatable in comparison with young people of previous generations. Research conducted on a huge sample (of more than 11 million respondents and participants) and analysed interviews revealed an interesting phenomenon, namely that iGens are much more tolerant and more acceptable in statistical terms than previous generations. Examples include becoming independent later ("spending more time in the family circle"), decreased alcohol use and less instances of first sexual experiences at a younger age along with a significantly higher degree of openness and acceptance of differences among people. Yet the essence of this generation's uniqueness and still unrecorded phenomena lies in a deeper analysis into motivation and attitudes evoking states no longer able to be perceived positively.

Philosophy for Children (P4C), through the development of three-dimensional thinking where the three dimensions are creative, critical and caring, provide the ideal conditions for the development of such a personality, able to communicate their views and attitudes in life situations, withstand the manipulative efforts and pressures from people and organisations seeking to control masses of people, dictate to them and enforce their own ideologies, all under the cover of democratic principles and rules. To become "healthy" in a critical, authentic and free sense in the realm of true morality in the realm of morality and decency requires the development of those thought dimensions P4C offers. The group in which an individual develops his or her own creative, critical, and caring thinking is called a community of inquiry.

4 Empirical research in a community of inquiry

In education and psychology, critical thinking is frequently inflected due to the insufficient level of study in Slovakia's schools. The methods employed in Philosophy for Children have not been sufficiently utilised in them and, likewise, there is an absence of research into the impact its methods have on the level of critical thinking, all of which drove us to focus on it.

The key objective in our research was to determine the level of critical thinking that has developed in secondary school students, based on sessions with a community of inquiry in order to ascertain the responses to the following questions:

- Question 1: Can model lessons from Philosophy for Children develop a level of critical thinking within two months?
- Question 2: To what extent can critical thinking be developed from P4C model lessons within those two months?

Research methods and methodologies

Due to the research problem, the aim of the research derived from it and the questions themselves, we opted to use quantitative-qualitative research methods.

Experiment

The experiment design used to achieve the goals was for several reasons "quasi-experimental (for example, both the sample experimental and control groups were small and there was only one secondary school involved in the research), yet despite the situation we strove to focus on as much objectivity as possible.

The input and output measurements described above covered two roughly aligned groups, using a critical thinking appraisal test that had been developed to measure it. Research was conducted on a small sample of a population of secondary school students, yet it provided many findings that can be used on a larger scale.

Tool for measuring the level of critical thinking

The Watson-Glaser Critical Thinking Appraisal (W-GCTA), a standardised psychological test (Watson, Glaser, 2000) named after the scientists who developed it. There are several types of this test and it has been used to measure critical thinking since 1926. The decision to use the Watson-Glaser test was made for several reasons. One of them was because the test contains 80 exercises and there were insufficient time conditions to utilise the agreed sessions with the students in the experimental group. The Watson-Glaser tests are extensive and we were not able to change the scope and wording of them.

Observation

Another significant method used in the research was observation through individual sessions. Here it was necessary to use recording equipment to document the hours spent with the students in order to have a closer look at the phenomena that had been set out in advance for each category. They had been told that the sessions would be recorded, while being assured that these were not rehearsals and their names would not be published. Indirect observation dominated and it was planned and systematic, with the manner and time of the observation precisely determined (Gavora et al., 2010). A type of structured observation was chosen that focused on individual critical thinking components.

Analysis of structured observation in the community of inquiry Several expressions of critical thinking were noticed in the community of inquiry, with just selected examples shown in the table below. None of the examples were evaluated for accuracy because some of the problems had no single correct answer. The age range (16-19 years) of the students in the experimental group was taken into account alongside the maturity expressed in the individual statements they made.

Besides these baseline components, other expressions of critical thinking were noted, such as the use of examples and counterexamples in Session 7, where Student 1 said that atheists believe in nothing and Student 2 added, "Atheists believe in themselves, but believe in other things; for example, they have faith in themselves," to which Student 3 offered her own opinion: "If we take some atheists who suddenly find themselves in a dangerous situation where they can possibly die, they will start praying as if it were natural for them to call to God, so maybe it's like second nature to humans."

Pre-test and post-test assessment methodologies

The critical thinking tool developed by us contained 12 questions and the time limit for solving them was 12 minutes. Both a pre-test and a post-test were conducted with the questions in the tests formulated differently, but measuring individual components of critical thinking. Therefore, the questions in the two tests were parallel. Most of the questions were open-ended, but there were also closed questions. The guidelines for assessing the critical thinking test specifically included taking the accuracy of the response into account and acknowledging any grammatical or spelling errors in the answers. The "eloquence" of the responses was not assessed, but rather the ability to capture the essence of the solution to the problem. The students' free answers to the open questions may have to some degree influenced the test assessment, so we decided to have it evaluated by two (or more persons) according to the guidelines for assessing the critical thinking test. Different questions therein ascertained the level of components in critical thinking.

Table 1: Critical thinking components applied at community of inquiry sessions - observations

Critical thinking components Knowledge base Reasoning	 Critical thinking relies on a certain knowledge base (facts, knowledge, skills) to help create relevant arguments. Justifying facts, analysing evidence and defending it. 	Reflected particularly when defining terms: SESSION 1: "Perfection is ideal only in our heads because for anyone something different is perfect." SESSION 1: "Women didn't use to be pressured about how they should look because today's media is pushing us an idea of beauty that's not real." SESSION 8: When asked whether the characteristics of a name "matched" the characteristics of the person, one student thought it was done on purpose to peg someone." Another student added that had
Ü	knowledge base (facts, knowledge, skills) to help create relevant arguments. • Justifying facts, analysing evidence	 SESSION 1: "Perfection is ideal only in our heads because for anyone something different is perfect." SESSION 1: "Women didn't use to be pressured about how they should look because today's media is pushing us an idea of beauty that's not real." SESSION 8: When asked whether the characteristics of a name "matched" the characteristics of the person, one student thought it was done on purpose to peg
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Reasoning		pressured about how they should look because today's media is pushing us an idea of beauty that's not real." SESSION 8: When asked whether the characteristics of a name "matched" the characteristics of the person, one student thought it was done on purpose to peg
		characteristics of the person, one student thought it was done on purpose to peg
		learned about it in psychology class as a trick like what is done with horoscope signs.
		 There are people sometimes reading horoscopes and, when they do, they right away try to take it seriously."
		• Question: How do you justify to someone else that we believe God exists?
		Student 1: "Well, it's only because we exist." Student 2: "Also based on these signs, there have been miracles even when the Virgin Mary appeared."
		Student 3: "I'd ask him how he believed he came into
Making judaamanta	 Indicating the various reasons for 	being."
Making judgements	linking two different situations.	 SESSION 1: When asked about whether it was better to think of herself as not perfect or perfect, a student replied: "I'd rather
		think of myself as not perfect and strive to improve myself than to think I'm perfect
		and humiliate everyone else." "Women didn't use to look at themselves
		like they do now because work overwhelmed them so much."
		 When asked about the criteria for beauty (such as pricing apples in a shop according to whether they were scratched or not), one
		student replied about whether it meant scratched apples weren't tasty.
		 SESSION 5: "Everyone around us is judged by their appearance and we probably
		couldn't do it otherwise because appearance is the first thing we see.
		 I don't believe any of us are racists but all of us have some prejudice against other people or tend to have it, such as when somebody's
		staggering down the street and right away we're asking ourselves about what'd
Assessment	 Setting criteria and priorities or 	happened." SESSION 1: "Beauty contests have no
	expressing an opinion.	deeper value. All they're doing is promenading across the stage."
		 SESSION 2: "If we get to know somebody from a society and they're bad, then we're
		judging the society itself even if someone from it can be good."
		 SESSION 4: "Children behave much worse than in the past because they're not punished
		so much either verbally or physically and few are setting the boundaries for their
		children not to be punished." SESSION 5: "I believe society is just paying attention to what's worse about the Roma to
		have something to talk about." "Calling a Roma a "gypsy" does not mean
		I'm a racist because that's what they call themselves."
		 "Roma are lumped together because we're not trying to gain insight about them but
Droblam galving as-1:11:	■ Desiring to compare and analyse	merely looking just at the surface." This component was visible in the responses
Problem-solving capability and willingness	 Desiring to compare and analyse phenomena, willing to receive new information from various 	This component was visible in the responses

	perspectives and using the new	group members were more involved than
Capacity to ask questions	 Taking the initiative to ask questions and desiring to know the answers. 	others, everyone was offered space to talk. Questions the students asked (either when they were initially asked or during the dialogue) SESSION 1: Why do people want to be somebody other than who they are?" "Why does everyone think they're not perfect?" "Why do people feel they have to meet someone else's needs?" SESSION 2: "What does school fill you with and how does it prepare you for life? SESSION 3: "Why do some people like animals more than people?" "Why are pets important to people?" In the dialogue: Student 1: "We like animals more because they aren't phony." Student 2: "What about cats?" Student 1: "Aha, they can be phony." SESSION 4: A student raised the topic of sibling rivalry and parenting by asking about corporal punishment. SESSION 8: "Can you really believe
Creative ability	 Readily, flexibly and originally suggesting how to tackle problems. 	anything?" SESSION 4: Student 1: "Living conditions for siblings need to be the same in order for them not to argue Because siblings are competing for things such as their parents' love and what they own, they don't envy each other when everything is equal between them. Or one of them has to budge when arguing with the other, only it's difficult sometimes because there are many things neither of them is aware of because they haven't encountered it, for example in books." Student 2: "Here you have to realise yourself that siblings need to help each other and not quarrel."
Ability to think logically	 Making the right decisions by distinguishing between incorrectly reasoned and carefully weighed arguments. 	SESSION 6: "Because sales assistants go to a shop every day does not necessarily mean everyone who goes to a shop wants to be a sales assistant."
Ability to work in a group	 Accepting or rejecting opinions from group members and letting them develop or modify your own views. 	 SESSION 2: "I agree with Adie, but would like to add a slightly different point of view." SESSION 3: "Interestingly enough, I've never thought about something similar from that perspective." "I agree with Dominika, but I'd like to add that the intelligence of cats can't be seen like the intelligence of people. For example, cats can't write and no one expects them to, but people can. So there's a difference between animals and people."
Ability to think independently	 Creating your own opinion through the group's influence, but reaching it yourself. 	 Everyone participating in the session knew what everybody else thought about something, yet had the opportunity to form their own opinions.

Table 2: Components of critical thinking in the Critical Thinking Test – pre-test

Critical thinking comp	onents	
Knowledge base	 Critical thinking relies on a certain knowledge base (facts, knowledge, skills) to help create relevant 	
	arguments.	
Reasoning	 Justifying facts, analysing evidence and defending it. 	
Making judgements	 Indicating the various reasons for linking two different situations. 	
Assessment	 Setting criteria, priorities and expressing an opinion. 	
Problem-solving capability and willingness	 Desiring to compare and analyse phenomena, willing to receive new information from various perspectives and using the new information practically. 	
Capacity to ask questions	 Taking the initiative to ask questions and desiring to know the answers. 	
Creative ability	 Readily, flexibly and originally suggesting how to tackle problems. 	
Ability to think logically	 Making the right decisions by distinguishing between incorrectly reasoned and carefully weighed arguments. 	
Ability to work in a group	 Accepting or rejecting opinions from group members and letting them develop or modify your own views. 	
Ability to think independently	 Creating your own opinion through the group's influence, but reaching it yourself. 	

Table 3: Components of critical thinking in the Critical Thinking Test – post-test

Critical thinking components		
Knowledge base	 Critical thinking relies on a certain knowledge base (facts, knowledge, skills) to help create relevant arguments. 	
Reasoning	 Justifying facts, analysing evidence and defending it. 	
Making judgements	 Indicating the various reasons for linking two different situations. 	
Assessment	 Setting criteria, priorities and expressing an opinion. 	
Problem-solving capability and willingness	 Desiring to compare and analyse phenomena, willing to receive new information from various perspectives and using the new information practically. 	
Capacity to ask questions	 Taking the initiative to ask questions and desiring to know the answers. 	
Creative ability	 Readily, flexibly and originally suggesting how to tackle problems. 	
Ability to think logically	 Making the right decisions by distinguishing between incorrectly reasoned and carefully weighed arguments. 	
Ability to work in a group	 Accepting or rejecting opinions from group members and letting them develop or modify your own views. 	
Ability to think independently	 Creating your own opinion through the group's influence, but reaching it yourself. 	

Analysis of pre-test and post-test results

The critical thinking tool confirmed pre-test input measurements in both the experimental and control groups, with no significant difference between the groups found in the results. A maximum twenty points was what the students could score in the pre-test and post-test. In the baseline measurements, the control group scored 157 points for an average of 8.26 points per student (there were 19 students participating in the control group), while the experimental group scored 156 points for an average of 8.21 points per students (the experimental group likewise had 19 students participating). Question 1 had asked if a level of critical thinking could be developed within two months from model lessons in Philosophy for Children (P4C). Post-test results in the

experimental group showed intervention to have increased the level of critical thinking, with participants in the group scoring a total 40 points higher than in the pre-test results. Participants in the control group scored a total two points higher than in the pre-test results. Question 2 followed up on Question 1, asking to what extent critical thinking could be developed from P4C model lessons within those two months. Although the responses were formulated for critical thinking to develop, there was no radical improvement evident after two months (8 sessions). Despite this, the results could be seen as favourable compared to the control group, where the level of critical thinking hardly changed.

Table 4: Pre-test and post-test results in the experimental and control groups

Canana	Pre-test score	Intervention	Post-test score
Group	Pre-test score	mervention	Post-test score
Experimental group (19	156 (average of 8.21	Between 18 January and 1 March 2018	196 (average of 10.32 points)
students)	points)	,	
Control group (19 students)	157 (average of 8.26 points)	No intervention due to the unique nature of Philosophy for Children.	159 (average of 8.37 points)

5 Conclusion

Summarising the findings that pertain to the research questions, it can be said that the secondary school students had experienced the development of critical thinking through the use of individual P4C methods during the intervention sessions. The research provided us with an exploration of the conditions in a Slovakian secondary school and a more comprehensive idea for using P4C methods.

In closing, we can express our conviction that under current education conditions existing in Slovakia, P4C can be

implemented in non-formal education. The advantage of non-formal education, in terms of content and process, is the greater degree of freedom and autonomy compared to formal education. The content of extracurricular and leisure-time educational activities is created at the institution level (of course, provided there is compliance with the baseline reflected in current legislation). Another advantage, and yet also a disadvantage, of non-formal education is its voluntary nature. There is no guarantee of accessibility to everyone, causing only a part of the population to be able to participate. Therefore, the challenge to be faced in the future is implementing P4C both in the content and process of formal and non-formal education. This would

open up the possibility of implementing a programme to develop thinking in different age groups, where at the strategic level it pursues the goals Slovakia's education system identifies as scarce and inadequate.

References:

- 1. Burjan, V. et al. 2017. Učiace sa Slovensko. Národný program rozvoja výchovy a vzdelávania.[online]. [cit. 2018-01-03]. Available on: https://www.minedu.sk/data/files/6987_uciac e_sa_slovensko.pdf
- 2. Gavora, P. et al. 2010. Elektronická učebnica pedagogického výskumu. [online]. [cit. 2018-02-03]. Available on: http://emetodologia.fedu.uniba.sk. ISBN 978-80-223-2951-4.
- 3. Lipman, M. 2003. *Thinking in Education*. 2. Edit. Cambridge: Cambridge University Press, 2003. 304 p. ISBN 0-521-01225-
- 4. Lipman, M. Sharp, A.M. 1994. *Growing Up With Philosophy*. United States of America. Institute for the Advancement of Philosophy for Children, 1994. 506 p. ISBN 0-8403-9373-3.
- 5. Twenge, J. 2017. *iGen*. USA: Simon and Schuster. ISBN 9781501151989
- 6. Krajnik, J. 2002. A gyermekfilozófia mint alkalmazott filozófia. In Karikó, S. (eds.) 2002. Az alkalmazott filozófia esélyei. Szeged: Áron Kiadó. ISBN 963 9210 23 4
- 7. Průcha, J. 2000. *Přehled pedagogiky*. Praha: Portál. ISBN 978 8071 783 992
- 8. Sprod, T. 2002. *Philosophy for Children*. [online] [cit.23.02.2019] Available on: http://www.isfp.co.uk/schools_philosophy_3.html
- 9. Watson, G. Glaser, E. M. 2000. *Watson-Glaserov test hodnotenia kritického myslenia: Forma C.* Bratislava : Psychodiagnostika. 69 s.

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