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The innovative approaches in senior education

Inovativní přístupy ve vzdělávání seniorů

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Abstract:

We present the implementation of innovations in the education of seniors. Theoretical knowledge is supplemented by research findings in 2019-2020. Quantitative and qualitative research is complemented by a description, analysis and comparison of the views of managers and students UTA. We identify and show the innovative elements in senior education which are applied by some countries in Europe. Innovation in senior education does not mean something new for other target groups in education.

Key words:

Innovation. geragogy, senior education, university of the third age, ICT.

Introduction:

Senior education is a specific segment of lifelong learning. It is specified by the target group of learners. Each person with an ambition to manage, educate or evaluate this process should be familiar with the general, scientifically verified knowledge related to individual attributes of education for elderly people. At the same time, the individual characteristics concerning their health, motivation, previous experience (educational as well), socioeconomic status must be taken into account. The mentioned findings work also in the field of geragogy, especially consultancy for older people, having the facilitating potential considering senior education.

Training and education for elderly people must follow the knowledge of several scientific disciplines focused on senior education primarily or secondarily. We are aware of the fact that innovation can encourage all curriculum categories but our emphasis is placed on the process.

1. Ageing population

Population ageing is also confirmed by the statistical figures. The survey into the structure of the Slovak population according to the age groups seems to be of essential importance.

Table 1 Population of the Slovak Republic by age groups

Slovak republic	The number of population	0-14		15-64	65+		
		N	%	N	%	N	%
2019	5 457 873	863 720	15,8	3 688 978	67,6	905 175	16,6
2011	5 397 036	826 516	15,3	3 886 327	72.0	682 873	12,7
2001	5 379 455	1 015 493	18,9	3 705 515	68.9	610 923	11,4
1991	5 274 335	1 313 961	24,9	3 415 721	64,8	543 180	10.3
1980	4 991 168	1 302 072	26,1	3 162 504	63,4	519 388	10,4
1970	4 537 290	1 232 721	27,2	2 883 333	63,5	418 340	9,2

(Source: Statistical Office of the SR)

Based on the data analysis presented in Table 1, the following findings can be stated:

- the number of people at the age of 65 and older in the Slovak Republic has continued to grow during the last half-century. This trend is obvious especially from the late 90s while rapid acceleration can be observed over the past decade. In the year 2019, the population aged 65 and above was 16.6% of the total population in the Slovak Republic. In terms of the growth potential of the older people, Slovakia is ranked the 28th country in the European Union; it means it belongs to the countries with the fastest-growing population aged 65 and above. This implies that Slovakia will become one of the European countries with the oldest population. At the same time, since the 2030s, the population aged 80 and above will gradually grow and it will result in an increase in the average age of the senior population. In the year 2060, the average age of almost 78 is supposed to be, in comparison to the age of 74 at these days (Repková et al., p. 5);
- population's growth rate at the working age (15-64 years) by 4.4% was observed slowing down over the past few decades (from 4.1% in 1991-2001 to 3.1% in 2001-2011). Over the last few years (2011-2019), a decrease by 4.4% was observed. On the contrary, the percentage of the population at the age 65+ accelerates, from 1.1% in the years 1991-2001, or 1.3% in 2001-2011 to 3.9% in the years 2011-2019;
- this trend reflects the demographic development in the European Union. In the years 2016 2080, the population at the working age is expected to decrease constantly until the year 2050. After that, the number of people at the working age will stabilise and the older population will become a more significant part of the population, compared to 19.2% in the year 2016, the population at the age 65+ will represent 29.1% of the population in the countries of the European Union by the year 2080.

Finally, it can be stated that the population is getting older not only in Slovakia. Following the document of the European commission "Ageing Report" (2015) it is expected that the average life expectancy for men in the EU will increase by 7.1 years over the predicted period (by the year 2060) and in 2060, its value will be 84.8. In the case of women, an increase by 6.0 years is expected, whereby, in the year 2060, the achieved value will be 89.1 (The 2015 Ageing Report, p. 1). The number of people at the age of 80 and above will be almost identical with the young population in 2060 (Ibid., p. 20).

Trends in Europe are described also in the report published by the United Nations in the year 2017 entitled "World Population Ageing" dealing with the global statistical data. In addi-

tion, there is mentioned the fact that in the year 2017, the world population aged 60+ consisted of 962 mil. people, i.e. the number is two times greater comparing to the year 1980 when the total number of older people at the given age was 382 mils. It is expected that the number of older people will be doubled by the year 2050 and the total number will be almost 2.1 milliards (World Population Ageing 2017, p. 1).

2. The educational contexts of senior education

Views on the current system of sciences focused on education and training (education sciences) are based on understanding teaching and learning as a lifelong process. This way, we can speak about stabilized and accepted process supported by a theoretical investigation. Scientific discipline focused on theory and methodology of teaching and learning for seniors can be considered an inseparable and integral part of the system. It is one of the youngest disciplines of education sciences accompanied by many discussions aimed at its scientific fundamentals. A discussion of the approach to the title of the scientific discipline can be mentioned as an example. A brief investigation into scientific terms associated with education sciences shows that there are several terms used to determine theory of senior education in our language environment.

- gerontopedagogy is a term used by an author of the first theoretical publication dealing
 with the issue of education and training for older generation, by E. Livečka (1979). Taking
 into account the importance and contribution of his work, this term cannot be considered
 sustainable in terms of etymology (two different ontogenetic developmental stages are included in it: "geron" Gr. old person, or "pais" Gr. boy/child);
- gerontagogy is a term used and accepted by the Czech scientists (e.g. its deep explanation mentioned by J. Veteška in his work published in 2017, p. 91);
- geragogy is a term used especially by Slovak scientists, explained in terms of terminology by an internationally recognised scientist in the field of senior education R. Čornaničová in her key work Senior Education. Origin, Development, Stimuli of Geragogy (1998). Subsequently, it is frequently used by other significant Slovak as well as Czech authors (Határ, 2014, Balogová, 2005; Špatenková & Smékalová, 2015). The term geragogy is preferred by the authors of this publication and at the same time, they state that heterogeneity of terminology associated with the title of the scientific discipline dealing with the issue of senior education is not considered crucial, although it does not contribute to an exact definition of this discipline of education sciences.

Effective transdisciplinarity is an important factor in terms of new issues of geragogy or in terms of an innovative approach to the scientific understanding of traditional issues of geragogy. Actual Slovak and Czech geragogy can be presented by various scientific publications and scientific works focused on theory, methodology, or empirical studies. It results not only in continual improvement in the position of the theory of geragogy but, at the same time, in its role as a medium of instruction. According to V. Prusakova (2005, p. 15), scientifically verified theory is transformed in requirements with real potential to improve the quality of the practice of geragogy. Besides above-mentioned works of the well-known Slovak and Czech scientists focused on geragogy, new ideas or topics explored in an innovative way have been mentioned by new authors over the past decades. Forasmuch as all publications and authors cannot be mentioned, our attention can be forced on following topics:

• senior education and trainings in institutes (Határ, 2014, 2011),

- intergenerational learning and its potential (Rabušicová & Kamanová & Pevná, 2012; Lenhardtová, 2015),
- senior education and their competences (Špatenková & Smékalová, 2015; Krystoň & Kariková, 2015),
- ageing (Formosa, 2012; Vavříková & Hudecová, 2018),
- active ageing (Tokovská & Müller & Hirtlová, 2015; Swindell, R. F., 2012; WHO 2002, 2015).
- innovative approaches to the content and processes associated with the education for an older generation (Balogová, 2018; Gracová & Spulber & Selecký, 2017; Jacob & Janeiro, 2015; McIntosh, 2005; Selecký 2017; Thalhamer, 2014).

Following the facts and findings, it can be stated that geragogy is an established part of education sciences with defined subject of investigation, functional intradisciplinary collaboration, high-quality scientific research and potential to develop although there are many issues to deal with in the near future (Határ, 2011, p. 83).

3. The innovation in senior education - methodology

Innovative approaches in senior education and training for older people must be perceived sensitively and their contribution must be evaluated in an all-embracing way. Negatives and positives can be observed as well as limits given by the type of a target group or by specific conditions (personnel, technical, organisational,...) typical for the educational process. To explain in simple words, when implementing innovations in senior education, functions or effectiveness must be assessed primarily in terms of people educated.

The research was conducted as a part of an international project 2018-1-SK01- KA204-04629: "Increase and Development of Manual Skills and Physical Vitality of Citizens of the European Union over 50 years".

Research methodology

Both quantitative and qualitative research methods provide a description, analysis, and comparison of opinions of managers and students engaged in education at the institutes in mentioned countries. Employing both qualitative as well as quantitative research methods are considered well-founded concerning the objectives of the research following the recognised references focused on methodology (Průcha, 2014, p. 108; Punch, 2008, p. 74).

Research question

"What innovations are used at selected foreign institutes designed to educate and train seniors."

Research sample

No. 1 – consists of 5 managers of the Universities of the Third Age (UTA) from the selected European countries (Portugal, Spain, Poland, Czech Republic and Slovakia).

No. 2 – consists of the students of the UTA from selected European countries (Spain, Portugal, Poland, Czech Republic and Slovakia).

Research methods

a) the questionnaire for managers of education:

It was distributed to managers participating in the international project from March to May

- 2019. With respect to the project objectives, the questionnaire consisted only of open-ended questions that require more than one word answers.
- b) the questionnaire for the people educated:
 - It was distributed to students participating in the international project from November to December 2019. Closed-ended dichotomous questions, questions with the responses from a distinct set of pre-defined responses, such as "yes/no" or among set multiple choice questions were used. The questionnaires were distributed personally handed out to achieve a higher response rate.
- c) standardised interviewing with managers of education: It was a tool to determine managers' approaches to managing UTA, especially implementing innovations in the European environment. The questions were prepared in advance in the Slovak and English language.

4. The innovation in senior education - research results

We were interested in what is understood as innovation in education by individual groups of respondents. The managers of UTA responded to the mentioned question as follows:

Respondent 1: "It does not mean something completely new. There are many ways to teach the same topic. In my view, defining and using the most suitable strategy is one of the most important factors to motivate seniors to study hard all year round. "Walking football" is an excellent example that works in Portugal. Movement – sports activity is connected with socializing and improving mental health. Football is a game known by everybody but "Walking football" can be considered an innovative physical activity for seniors. And this way, the innovation in senior education can be understood."

Respondent 2: "For me, it means any ways or methods resulting in the improvement in teaching and learning process."

Respondent 3: "Something new, something we have not heard about it before."

Respondent 4: "It causes positive emotions, because I like innovations. According to my opinion, innovation should be a part of everyone's job — no innovations result in stagnation. Stagnation is a prolonged period of little or no growth, it means nothing positive."

Respondent 5: "In my opinion, innovation is an implementation of new practices supporting the teaching and learning process and improving the quality."

Table 2 What do you mean innovation in education?

What do you mean innovation in education?		CZE	POL	ESP	POR	average
method to improve education	3,45	4,50	5,05	4,40	4,40	4,36
way to improve education	3,90	4,15	5,20	4,25	4,10	4,32
something attractive	4,15	2,45	4,90	4,35	5,65	4,30
seniors motivation for learning	4,00	3,40	5,20	4,25	3,25	4,02
something new	3,40	4,25	4,90	3,35	3,70	3,92
opposite of stagnation	2,40	2,25	4,55	4,15	2,40	3,15

(Source: own research)

The students – respondents were asked the same questions in the questionnaire. Their task

was to evaluate individual alternatives describing innovation in education using the scale of significance. (6 = the most significant, 1 = the least significant).

The analysis of the respondents' responses showed that innovation is regarded by both groups (students and managers of UTA) as a positive phenomenon enriching the education, improving the quality, and attracting the students. Following such a positive assessment, it can be stated that innovations are not viewed in a negative way, as a fear of change that can make people resist the best of ideas. In terms of the concept of education, innovations are connected especially with the processes of education (way, form, method, etc).

We were also interested in innovations associated with technology the seniors are experienced with.

Table 3 Experience with innovations of technical and technological nature – UTA students (No.2)

Technical and technological innovations		CZE	POL	ESP	POR	N	%
Social networks (FB, YouTube, Twitter, Instagram)		3	16	17	7	58	24,6%
Communication (Skype, Viber, FB Messenger, WhatsApp)		0	17	14	6	9	20,8%
Student's card	1	14	1	17	13	46	19,5%
Virtual UTA		0	8	20	3	44	18,6%
on-line, off-line courses		3	3	8	1	20	8,5%
MOODLE	7	0	0	6	0	13	5,5%
MOOC courses	0	0	0	6	0	6	2,5%
Total	53	20	45	88	30	236	100%

(Source: own research) note: The respondents could mark more than one answer N > 100.

The presented results correspond to the reality mentioned in previous parts of the article and confirm the findings that seniors attending the UTAs are open to using new technology, innovation, especially with respect to the communication functions. On the contrary, our findings confirm that innovations connected with new education technology or processes of education are not so attractive for seniors and are not viewed positively.

5. Discussion

The aim of presenting the above mentioned empirical findings was to explore the real situation in the field of implementing innovations in the process of senior education under the specific conditions of the Universities of the Third Age. The basic research question was formulated: "What innovations are used at selected foreign institutes designed to educate and train seniors?"

Following the comparative content analysis of the responses, it can be stated as follows:

Innovation is a well-known topic by the managers and students of the UTAs generally
evaluated in a positive way. Innovation is viewed as a new and inspiring element enriching
teaching and learning process affecting its quality.

- Project participants managers of the UTAs mentioned that they are experienced with innovations. Specific examples of teaching and learning activities considered innovative by managers were described in the research. Types of innovations vary. There are innovations associated with a content ("Walking football", "Radio senior", "Tourist guides"), with a concept ("Peer to peer education", "Intergenerational cooperation", or "Intergenerational learning", "Seniors for seniors"), as well as innovations based on modern education technology ("Virtual University"), or using modern information and communication technology (university information system, SMS gateways, communication applications, social networking sites, etc.). Participants from the UTAs are experienced especially with innovations associated with modern technologies. Important but not surprising is a finding that (confirmed by one of the managers, too) innovation need not to be a unique element, it can be a common phenomenon (football, radio broadcasting, tourist guiding, student cards, Facebook,...) in other areas of life, conditions, population group or other institutes (including those aimed at education).
- The managers of senior education see not only advantages positive impact of innovations but also potential limits or risks related to their application to senior education Depending upon the individual type of innovation, the most considerable benefits were mentioned:
- a) concerning seniors: motivation, development of cognitive abilities, knowledge acquisition, acquiring new or developing existing skills (especially those connected with modern communication and information technologies), expanding the social network, active participation in society (supporting active citizenship), active ageing.
- b) in relation to organisation and managing the education processes: effective communication, creating effective administrative procedures, but mainly effective information spreading affecting the interest of seniors in provided education (education marketing strategies).

Risks or disadvantages of innovations mentioned in responses were connected with specific activities. The most important negatives were: different levels of seniors' ability to cope with tasks (e.g. differences in digital literacy), or heterogeneity in target groups, time and organisation, difficulties with human resources, frustration due to unfulfilled demands, negative effects of multitasking. The value of the findings is very high also in the field of geragogy – consultancy for older people.

The response of one of the project participants can be considered valuable and meaningful corresponding with our assessment of innovations in senior education: "What is considered innovative by managers might not be perceived to be innovative by seniors."

Summary

Following the theoretical analysis of the present and future social, mental, educational, and institutional context of senior education, it can be stated that the room for innovations is not only made but it becomes an inevitable condition for its further development. Innovations must be viewed as one of the reactions related to changes in seniors' needs resulting from the social, economic, cultural development as well as technological advances. At the same time, they are one of the opportunities to meet changing seniors' needs. Respecting exogenous as well as endogenous factors is one of the essential conditions determining the effectiveness of innovations in the process of senior education. In other words, the scope and nature of innovations mentioned in various strategic documents and similar sources of domestic and international provenance must be assimilated according to individual personal traits and living conditions determining the target group or personality participating in the education. When the principle is not taken into account, the risk arises that the role of innovations will change.

They will become mental, material and organisational barriers to education. Such a demand exists also in the case of innovations in the geragogy practice based on the utilisation of modern technology and processes expanding these days. They are at the centre in this text.

The intention of the authors, content and methodological construction of the publication covers the context of the mentioned opinions. The article is intended for the scientific community aimed at geragogy as well as all other professionals dealing with individual aspects of education of older people.

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