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METHODS AND FORMS OF SENIOR EDUCATION¹

The specifics of educating seniors

The differences between the educational processes at particular stages of life² may be considered from different angles: goals, needs, learning motivation, the subjectivity of learning by adults, abilities to gain competences along with the consideration of cognitive changes (ageing of minds, changes in cognitive function, including to the memory), social, cultural, civilizational conditions (time for more or less encouragement regarding education, which promotes knowledge as a value and a source of a happy life). Also, important factors which should be considered in the didactic context include: contents, methods, forms, didactic sources, the specifics of the educational facility, the role of the teacher of adults, and the operation of the educational process. During life, the aforementioned conditions change, so the educational situation of older people is subject to a constant didactic approach in every stage of life (Dubas 2009, p.129).

It should be mentioned that the specifics of teaching seniors is connected with a few crucial issues, among others:

- The specific attributes of the learners – their own features, life experience, approach to the content, psychophysical condition, motivation, and material resources;
- The learning style derived from the methodological-personal qualities of the teacher;
- The learning style of older people – their preferred way to acquire knowledge and skills;

¹ This part of the journal is an updated and extended version of the chapter *Methods of Education of Older Adults in Poland* in the book edited by R. Kocianova (2013, pp. 106–112).

² The specification of these phases is possible from a number of angles: legal, biological, cultural, and mental.

- The features of the facility – lectures in institutions devoted to the specific group are performed differently from courses, where the ages of students in the group can vary;
- Subject didactics connected with the choice of educational tools, methods, forms, sources, contents, exercises, audiovisual aids, and information tools.

According to E. Skibińska, “the basics of every educational process, on which the further actions of the teacher and the seniors who are learning depend, are set by learning goals” (Skibińska 2008, p. 98). It should be mentioned that general educational goals are strongly connected with the transformation of the surrounding world. They reflect the changes connected with the dynamics of social, political, economic development on a macro scale with the consideration of the specifics of each cultural area. Understanding the modern world and the conscious participation in many areas of everyday life is a basic assumption of adult education. Searching for the most appropriate teaching goals is not a simple activity for teachers, and their formulation with full consideration of the needs of the adult students demands a huge level of knowledge in the matter of social gerontology and empathy. Transferring the stress in educating adults from teaching to learning implicates the involvement of seniors in constructing their own learning goals. Assuming that the core of senior education didactics is the transfer of the decision making, activity, and responsibility for education to the learners, the educational goals become individual projects which meet the needs of the individual.

Considering the changes to the main area of interest in gerontology, which currently does not include only those processes connected with education adults, but also refers to the issues of lifelong adult education, current education goals should be redefined. Based on the theory by R. McCrae and P. T. Costy (2006) on the steadiness of unit personality in adulthood, scientists have formulated a 5-factor personality model, made up of: neurosis, extraverted, openness to experience, amicability, and conscientiousness. Based on both their own research and conclusions drawn from research by other scientists, McCrae and Costa came to the conclusion that the way in which the early stage of development functions determines existence in old age. Thus, as it transpires, personality is a permanent core, on the basis of which any adaptation to a changing reality takes place. Thus, educational goals, however formulated or defined, do not contribute to personality change but are only an indicator for attaining the desired knowledge or skills.

Any discussion of educating older people should include reference to one of the many taxonomies of educational goals, in this case those proposed by A. Fabiś (2005). The division of goals presented below is connected with three elementary functions: emancipative, altruistic, and egoistic.

Emancipative function directs the educational process for the individual improvement of the quality of life, attending to life satisfaction and the steady development of

interests, freeing oneself from oppressive conditions, and the creation of a better future. Nevertheless, emancipation refers mainly to actions for the benefit of senior societies, so it is considered within the macro domain, with reference to other generations. The basic goal in this matter is to provide seniors with a strong position in the social structure. Among the goals detailed, the following should be distinguished:

- The maintenance and development of activity in many areas in the life of seniors, which may be one of the determinants of living a dignified old age. Learning in old age allows seniors to maintain proper competences to act, as well as to discover new activities, to enter a world which was unknown until now, which stimulates constant development, to free oneself from stereotypical roles, and to exist in many areas of social life.
- **Care for the position of seniors in various environments** is seen as an emancipative task; seniors make their presence felt in new areas of social life and reinforce their position in areas represented already by this age group. From the perspective of the needs of seniors, activity in this matter is a form of fulfilling needs, recognition, and belonging.
- Creating leaders among seniors **creates the possibility to emancipate this generation**. Self-dependence and independent existence in this sense take the form of actions for the benefit of seniors by older people. Leaders among seniors are strong units of action, they inspire, initiate and unite themselves around others, leading to the creation of creative and active communities.
- **Handling a changing reality** is connected with the incredible dynamics of change along with technological development but also with social and cultural changes.

Altruistic function in adult learning refers to activity for the benefit of others. This activity may even take the form of a lifestyle, and for seniors is an obvious, desirable action which builds the identity of an adult person. In this category of educational goals, one may distinguish:

- **Understanding of the world** – described as the constant acquisition and extension of general knowledge, and understanding the changes that occur in the surrounding world. Understanding has to lead to acceptance and the recognition of the needs of other human beings – and finally to not only understanding, but also taking action for the benefit of others.
- **Actions for the benefit** of others e.g. voluntary work; the acquisition of competences to act for the benefit of other people, the discovery of the meaning of being other people and being there for them. It is a feeling of being useful to those who need support.
- **Communication with others** on various levels – from family or social relationships to professional, allows seniors to get closer to others, get to know them, and to act for them. Intergenerational dialogue creates many barriers e.g. distance, technology,

language. Learning leads to overcoming these barriers, which leads seniors to get closer to other people, to establish relationships and to work for their benefit.

Egotistic Function is a healthy egoism which enables self-development. In old age, care should be taken of not only the family or the local environment but also one should concentrate efforts on self-development, which is a form of the full development of humanity. In this matter, one should distinguish:

- **Personal development**, which refers to the constructive assumption of developmental psychology, so lifelong development until the end of life. Thanks to education, humans can develop in chosen areas and can extend the reach of human knowledge.
- **Handling existential problems.** Old age is a time during which a person with life experience may confront his/her existential concerns by searching for the answer to the most difficult questions about God, the meaning of life, and an evaluation of their own existence. Learning helps to confront existential concerns, to become smarter, to finally evaluate one's own life and prepare for death.
- **Spiritual development.** Life in the state of rich spirituality in old age is determined by the maturity of the person. This is the development of the most intimate sphere of human life, getting closer to the absolute, so is connected with the development of spirituality, searching for higher values, and with transcendence.

To sum up, the above-mentioned considerations in reference to educational goals, it should be underlined that they lead to the most basic areas connected with the need to "understand and interpret the surrounding world, to have one's own skills which make everyday life easier, taking care of the self, and the achievement of the highest standards connected with these issues" (Skibińska 2008, p. 100).

Education in institutions such as UTW takes place with the help of different methods than in the traditional pedagogical model³. Moreover, the specifics of teaching older people change depending on the age of the people who are starting education since particular age groups have totally different educational biographies. In light of this fact, the elementary issue is that the educational system of adults-seniors is based on the andragogical model, which is different in many areas from the pedagogical (school) model. The andragogical model of education in old age features the following elements (Knowles, Holton, Swanson 2009, pp. 65–69):

³ It should be underlined that the typical pedagogical assumptions and models refer only to teaching children, which demands a different approach towards the teaching process than with adults. In these models, the responsibility for what and with what methods a child will be taught – the subject of education – is the responsibility of teachers, unlike in the case of adults, who are self-dependent and have concrete didactic needs.

- **The need for knowledge.** Adults must know, before they decide to study a chosen area of knowledge, what the reason is behind their decision to become active in education, and why they want to learn. Considering one of most important paradigms in adult education, it should be underlined that the main task for facilitators of learning is to help students to realize the need for knowledge. In the case of UTW students, the phenomenon often appears of making up for deficiencies left over from formal education. Seniors, through deficiencies in their education, and a willingness to develop hobbies, which due to many reasons were neglected at the early stage of life, have a need to gain new knowledge and skills⁴. Also, it should be underlined that UTW students form a specific group within the group of elders, generally at a high intellectual level, active members who break the stereotypes of the chronically ill, dependent person.
- **Constructing the image of the self as a learner.** This is an extremely interesting issue, since adults who return to the role of students in an institutional form find themselves in an antagonistic situation. On the one hand they want to be independent and to make decisions about the educational process; on the other hand, they must submit to the education in many situations. Returning to this role, this time to an institution directed towards people in late adulthood, allows them to change their views about the processes connected with learning and teaching⁵
- **Significant life experience.** Older people start their education at UTW with a huge range of different experiences deriving from the length of their lives⁶. Adult groups feature greater heterogeneity when it comes to the origin, education, learning style, motivation, needs, interests and goals of the students; thus, the focus in educating adults is put on the individualization of teaching and learning⁷. The experience

⁴ The didactics of teaching older people are problematic, however, as they demand the choice of proper program content, teaching methods, the application of didactic sources adjusted to their age, and the principles of learning. Unfortunately, in the context of UTW students, this area demands the performance of constant analyses since it is still a new area. In the subject literature in the matter of social gerontology over the past few years, the first detailed analyses are beginning to appear concerning the specific conditions of senior education e.g. ageing psychology, geragog profession, teaching methods in the matter of information technology.

⁵ UTWs are unique institutions concerning their choice of teachers, since in most cases these are people much younger than the students, so in comparison with a traditional school e.g. elementary school, which is remembered by older people as a completely different educational model based on reverse transmission since it is young people who are the source of knowledge and teach the older.

⁶ The best example is the difference in the matter of the process of becoming competent in information technology. For the younger generation new media are a natural environment and numerous e-services are integrated with reality (e.g. shopping, communication, information), whereas for older people, understanding and finding themselves in the virtual worlds requires education.

⁷ During lessons in the computing section of the UTW in Cieszyn seniors propose the lesson topic. The differences among the group are expressed in different levels of competences, the different reasons for learning e.g. some want to communicate with family abroad, others with friends in

gained carries a negative outcome in the form of the tendency to use those habits of prejudice and assumption which may close the minds of learners to new ideas and an alternative way of working⁸. Reaching the mental state of openness to new possibilities comes from the proper support of the teacher. Geragogy, through the application of correct arguments and by underlining the utilitarian character of solutions, is able to encourage students to use new tools, solutions, and ways of thinking.

- **Readiness to learn.** Unlike children, adults become ready to learn in situations where they need to possess certain information or skills in order to effectively solve life problems.
- **Specific orientation in learning.** Unlike the orientation where learning is focused on the subject, a situation which most often appears in traditional school education, education at the UTW is focused on problems connected with life. The motivation to learn is determined by situations in which the acquisition of new knowledge, skills, and values allows students to function freely.
- **Motivation.** During intermediate adulthood, people are vulnerable to the various factors of external motivation, such as: better work, promotion, higher salary (Kocianova 2012). In turn, during late adulthood the kind of determinants change, favoring certain activities⁹. Stimulants that most strongly affect seniors are outside factors (improving self-confidence, life quality, willingness to change everyday function etc.). The research carried by Tought showed that adults, regardless of age, are motivated for constant change, but this motivation is blocked by: negative self-image, lack of access to chances or resources, time limitations, and the violation of principles concerning learning by adults in educational institutions.

Methods and forms of education and the educational offer

Even the most consciously-chosen goals, and most appropriate content, cannot guarantee didactic success if they do not correlate with appropriate educational activities. This task is fulfilled by the correctly chosen methods of teaching (Skibińska 2008, p. 103), which are described as leading the way to reach the goal. In educating adults, teaching and learning methods play an important role. Andragog mainly uses methods which support the

Poland. Sometimes there are opposite propositions in the group from different areas of interest e.g. digital graphics, converting music from CD to Mp3 or text editing.

⁸ An example confirming this tendency are the results of the research carried out at the UTW in Cieszyn, where students, given the possibility to choose their learning mode, indicated: traditional lessons (group and a teacher) – 44 people (88%), internet-only lessons – 2 people (4%), mixed (part of the material realized in a traditional way and part by internet) – 4 people (8%), which indicates that the experience previously gained determines one's preferences with studying.

⁹ Some students of the UTW in Cieszyn are still professionally active, and due to their participation in UTW lectures, they are still able to function professionally thanks to improved computer skills or foreign language knowledge.

independent work of students. Due to these stimulating and interactive work methods, the activity of the students is developed and not simply knowledge transmission. Activation methods include: various discussion types, problem solving (brainstorm, situational method, interactive games, *case study*), practical methods (working by instruction, exercises), and curricular teaching (Matlakiewicz, Solarczyk-Szewc, pp. 116–131).

It seems that among the four elementary groups of teaching methods, observation, action and problem solving, the most effective methods is oral teaching, a situation which has its roots in the educational biography of seniors. This does not mean that they are not open to new learning methods or new didactic sources. Learning foreign languages or participating in biographical lectures presents learners with a new challenge, both in the learning method through role-play, through triggering emotions, as well as in the area of new didactic sources such as computers and internet. At the same time it is important that when the choice of teaching methods is made, potential resources of the older generation should also be considered, for instance in biographies, as well as the limitations connected with changes in the cognitive processes: perception (sight, hearing, touch, and smell), attention (conscious and subconscious), memory (visual, kinetic, audial, long-term, short-term, mechanical, and logical) and thinking (image, words, logic, sensory).

These given methods were combined with activating methods based on new media, group work, reading, life reflection, and dialogue. For instance, among the unique methods of work with seniors, learning from life history has become more popular. These methods and research in reality are more and more used in a few scientific institutions in Poland such as the University of Lodz (andragogy and Social Gerontology Institute), the University of Wroclaw (Institute of Pedagogy) and the Higher Administration School in Bielsko-Biala (Human Science and International Studies Department). In order to understand this method, it is worth studying the case on the basis of a description from the lectures *Learning from life and biography* realized in the framework of “@ktywny Senior” project in Wroclaw. The aim of this study was to create the possibility of exchanging life experiences, recalling events from the past and life experiences, looking at one’s own experiences from a completely different and new perspective, and providing stories from the past with new meanings. The groups in which these lectures were conducted consisted of 10 people, and touched upon topics including the following issues: “my invisible environment”, “the journey of my life”, “childhood memories”, “adulthood time memory”, “the meaning of friendship in adult life”, “emotionality and its meaning”, “the image of my family home” and “searching for the recipe for longevity”. Each of the lectures began with an introduction which encouraged the further activity of the participants. Among the didactic sources which supported the lectures were photographs, written memories, and cards with unfinished sentences which initiated discussions by the participants of the project. According to the author of the lecture: “participants appreciated the value of sharing their own experiences, which can be so different. In andragogy, they are given

the status of a personal teacher, and their educational potential is recognized[...]. Under the influence of the stories told and heard, all the participants learn from each other. Listening to opinions on the chosen topic often shows different perspectives, which help to evaluate one's own experiences. It is helpful in building one's own life summary, especially when it seems to be negative" (Wnuk-Olenicz 2012, pp. 47–48). The issues of a lifetime in senior education are touched upon by J.K. Wawrzyniak (2013, pp.59–62) who encourages writing autobiographies in the book *Autobiography as a creative challenge. Scenarios of biography lectures*.

It should be underlined that the trend called biographical didactics was intensively developed in Poland by O. Czerniawska, E.Dubas, E.Skibińska, J. Stelmaszczyk, M.Sulik, who were inspired by the work of the Italian scientist D.Demetrio. Many social gerontologists who prefer to use quantitative research state that this is the most promising scientific-didactic trend. Among the subject literature in this matter, the works of the biography research center in Łódź (Dubas, Świtalski 2011a,b) are especially interesting.

Apart from the above-mentioned methods, traditional educational solutions should be mentioned, and these are auditoria forms. Readings, pre-lectures, scientific lectures organized by cultural institutions, senior clubs, museums, regional chambers, and libraries, and are popular in both big cities as well as in smaller towns or in the countryside. Moreover, the experience of such cultural centers in Poland shows that there is a growing popularity of author meetings and lectures to which people of interest, most often travelers, politicians, social activists, scientists, artists, and writers, are invited. One of the target groups which is especially active in this kind of meetings are seniors (Aleksander 2009, pp. 193–195).

Apart from the new courses which are further described in the next subsection, the most popular among seniors is foreign language learning. There are papers that touch upon the problem of the methodology of teaching foreign languages to seniors (Jaroszewska 2013). The acquisition of a foreign language demands long and difficult study; moreover the process is extremely difficult because of the ephemeral character of the lexical resource. In the case of seniors, the study in this area is determined by the need to improve communicativeness during journeys abroad, in correspondence with friends who live abroad, or it is a result of other interests. During the organization of foreign language lessons for seniors, it is important to determine the level of linguistic competence before beginning to teach in particular groups (just as in the case of exercise in the matter of computers and internet use) in order to determine the students' level of advancement. Among Polish seniors, most groups are of low or very low linguistic competence. Most often during language courses the following types of competence are developed: developing vocabulary, the ability to use grammar structures, understanding text, understanding phrases heard, and building utterances. The authors and the teachers of senior language courses underline that among the main elements which favor the adjustment of language courses to the needs and abilities of seniors, special attention should be paid

to: the choice of textbook with consideration given to the accessibility of the content for people with damaged sight, which includes printing the written text in a bigger font and using more visible illustrations. Moreover, the meetings should take place at an appropriate tempo that would consider the perception features of the participants, and also the constant revision of material to ensure that it is learnt well (Gulanowski 2012, pp.65–72).

In 2012, via the Ministry of Culture and National Heritage, on the last weekend of September, seniors (free of charge or for a symbolic fee) were able to take advantage of the programs of the cultural institutions in the whole country. The *60+ culture* was participated in by over 200 facilities in Poland. Programs dedicated to seniors were various – from free entrance to organized meetings, lectures, and guided tours. Similar forms of education for seniors are becoming more popular in Poland thanks to, for instance, cinemas and cultural centers, which are open to the oldest clients by offering free or reduced-charge entrances.

In the choice of teaching methods, it is necessary to consider the specifics connected with old age, so with the cognitive processes, such as sight, hearing, mobility, memory, verbal, and manual abilities (Skibińska 2008, p. 103).

An example of the variety of educational undertakings for seniors may be the program of the University of the Third Age in Cieszyn:

- Lecture meetings (every fortnight) – lecture methods, most often supported by didactic sources in the form of multimedia presentations or realia provided by the lecturers;
- Linguistic meetings, regardless of the level of advancement and are dominated by conversations, and exercises with texts and a workbook.
- Sports exercises (Nordic walking, fitness, aqua aerobics, yoga) with the use of instruction methods and independent exercising;
- Art lectures (painting, ceramics) based on independent, expressive activities;
- Tourism lessons – journeys, meetings with nature and a chance for spiritual and emotional development, completed by a description or conversation outdoors;
- Health lessons realized within the project co-financed by the county, based on giving and activating methods (e.g. lectures on healthy nutrition);
- Computer classes carried out with traditional methods (lecture, instruction, independent exercises, and problem solving) and innovative (*blended learning* – self-education in the framework of free online courses e.g. on the Polish National Bank Platform; communication with lecturer in a synchronous way (e.g. Skype) or non-synchronously (*e-mail*) (Tomczyk 2010, pp. 52–61).

In summarizing the teaching methods and forms it should be underlined that by making a choice, one should be aware of the variety of needs that seniors have. People in late adulthood are different from each other in a much more significant way than at the early old age, which is confirmed by research results presented by developmental psy-

chologists (Bee 2004). An individualized approach and the creation of small educational groups appear to be the optimal method, especially for the more difficult areas such as foreign languages and new media use.

New media in educating seniors

During the different stages of history, different types of transferring and gathering information dominated. People who wanted to adjust to the latest conditions in order to take part in interpersonal communication, had to master the media – they had to learn the communication code (speech and writing), learn about the possibilities of technical devices (telegraph, phone, radio, television) and – currently – gain competences in the area of information technology. The difficulty for seniors to adapt to the new, directly and indirectly informational space appears in the form of low usage of the various types of microelectronic devices. Old media, such as radio, the press, and television, are their natural environment for discovering information, whereas the personal computer with internet access, multifunctional mobile phone, or other mobile multimedia devices (smartphones, tablets) are hardly ever used and then mainly by those who are aware of the advantages they offer. Progress is determined by new technologies, requiring modern people to possess competences in the area of using objects with an everyday use, including devices with access to the global web.

New media has irrevocably changed the way both social groups and individuals function. This obvious statement gains a new meaning when one considers the positive and negative results of this process connected with the psycho-social operation of particular age groups in an information society. One of the unfavorable results of digitalization is the phenomenon of digital exclusion, which is apparent in the oldest social age groups.

Features of Polish digital society have been evolving for years, and the share of older people using the new media is constantly growing. Nevertheless, in comparison with other societies in the European Union Polish society finds itself in an unfavorable position. Originally, the internet was created by young people for the younger generation; thus, the percentage of senior people is still at a low level. The specifics of the use of this complex device, the computer, a lack of knowledge about the possibilities of using new media in everyday life, an aversion to technical novelties, and other limitations e.g. economic, have given birth to a new type of exclusion – namely the division of societies into *online* people and people excluded (and those who exclude themselves) from the information society – *offline* group. Table 19 shows the percentage of particular age groups in Poland as regular Internet users.

Table 1. People regularly using a computer

Age Groups	2008	2009	2010	2011	2012
	% of the overall				
Overall	49.9	55.3	57.7	60.0	60.2
16–24	89.8	93.5	95.1	96.5	95.2
25–34	73.3	80.7	83.7	86.7	88.1
35–44	55.4	64.2	68.7	72.4	76.0
45–54	39.2	45.4	49.1	49.1	51.3
55–64	23.1	26.3	27.4	31.6	31.5
65–74	5.7	6.9	8.8	10.8	14.9

Source: GUS 2012, p. 94.

In order to prevent digital exclusion and to improve competences in the area of information technologies within last few years, a range of educational actions have been taken such as those at the aforementioned universities of the third age, in the framework of which courses at various levels of advancement were introduced. One extremely important stimulant for education in the area of new media in Poland has been the use of various funds (Human Capital – PO, KL, Civil Initiative Fund – FIO, grants from the ministry of Labor and Social Policy for pro-senior organizations) which support education, due to which projects have been financed aiming at the improvement of the knowledge and skills which are crucial in new media use. Most often, in the framework of computer courses financed with grants, older people were trained in accordance with a standard which ensures the confirmation of the competences learned by external tests e.g. the European Computer Driving License ECDL. The level of basic courses was connected with trends set by ECDL E-Citizen standards, whereas the lower-intermediate were set in conjunction with the ECDL Core standard. Considering the specifics of these external tests such as the above-mentioned ECDL, it should be underlined that for older people who are only beginning to learn about new media, these are extremely complicated exams. The difficulty in the positive verification of knowledge and skills is connected with the short time allowed for completing the test, an insufficient level of technical skill, and the inability to read the test questions with comprehension, which is correlated with a reduced ability to use technical vocabulary.

The teaching of new media, realized by various non-government institutions, senior clubs, UTWs, volunteer fire brigades, and women's organizations, are supported by a growing number of didactic sources – namely – books, interactive tablets, multimedia scripts, internal tests, internet platforms, and convergent devices. Currently, more than

30 books exist on the Polish market which are dedicated to seniors and describe how to use a computer with Internet access. Moreover, for two years the periodical “Komputer Świat Senior” has been published, which describes the latest software and technical solutions that may be used by generation 50+.

Non-system solutions include a few examples that allow one to understand the specifics of learning and teaching seniors in the area of new electronic media. For instance, in the framework of the National Program for the benefit of social activity of older people, *The foundation for Jagiellonian University realized the project “mobility in the third age”*, in the framework of which a few UTWs students were trained in the area of tablet and smartphone use, as an alternative to the traditional computer with internet access. The project included over 300 people who took part in plenary lectures, whereas over 60 people had the opportunity to get to know the mobile devices by being active users during their 12 hours of training. The aim of the project was to illustrate practical examples of mobile device use to fulfill needs in everyday life.

Another solution that ensures the participation of seniors in the area of new technologies are courses organized by non-government organizations and volunteers. For instance, since 2012, in the framework of *Digital Poland of Equal Chances* 2614 educators were trained and who now work to prevent the phenomenon of digital exclusion. Within the last few years, this has been the biggest event concerning the intensive preparation of people to educate adults who are considered digitally-excluded. Thanks to the 2-day training, volunteers who work in various branches, not necessarily connected with education, become new media educators. They offer courses free of charge in local communities in Poland that concern information classes for adults, including seniors. The number of participants is yet to be estimated, but it is stated that these activities concern several thousand people who are considered digitally-excluded. Educating such a large group of adult educators is surely one of the more important events on the educational map of Poland and Europe in 2012. It should be underlined that the *Digital Poland of Equal Chances* program won first prize during the Information Society Summit organized in Geneva by the International Telecommunication Union in the category *Capacity building*, which is concerned with building digital potential. This type of educational activity is a phenomenon unknown until now, since in the branch of digital education, the universities of the third age, non-government organizations, and commercial firms had taken the lead (Hofman, Tomczyk 2013).

In Poland, there are more commercial solutions in the matter of senior e-education. For instance, on the *Edu50plus* platform, there are four courses available: *Memory training for seniors*, *Useful computer graphics course*, *Prepare for mature exam* and *Internet course in creative writing*. The website authors underline that: “the intention of edu50plus was to reach mature women and break the myth that distance education, modern technologies, and the internet are unavailable to them. We assure that in the case of any dif-

difficulties or doubts, the great and friendly trainers will make the *e-learning* training an incredible journey” (Edu50plus). The cost of participation in the training is 300 PLN.

Seniors who become familiar with new media underline that in the case of undertaking educational activities, they have a range of doubts which influence the didactic process. The most often mentioned barriers are as follows (Wierzbicka 2008, p. 58).

- Worries about damaging the electronic medium – most often derived from a low awareness of using the device and its worth. Regardless of common accessibility and decreasing computer prices, the majority of people are worried that they will damage the equipment beyond repair and would have to pay for the damage.
- Worries derived from a lack of knowledge about the equipment’s features and their potential applications, which may determine an increase in the quality of life of the people who use it. Very often this phenomenon is observed among adults and reflects a decreasing curiosity towards technical novelties. These worries are connected with an overwhelming fear of the unknown. Due to a lack of knowledge about computer use, the potential user, by seeing its virtual, complex nature, assumes difficulties in using the equipment. Thus, it is crucial to break this view of electronic devices;
- Incomprehension of the instructions and messages that appear during operation – the situation is a result of too little practice, which prevents the formation of certain habits which are typical for a particular piece of software. This fact is connected with the preparation of popular applications for users who, when using new media, demand friendly software;
- An overload of unintelligible vocabulary, typically the specific technical vernacular used by the lecturer or that occurs in the subject literature, which discourages further education or hinders the acquisition of certain skills. Specialist terminology and the need to move around a new, unknown space, leads to the fact that people are not able to understand the command or sense of the knowledge;
- A mistaken image about computers and the internet and what they are capable of – there is also a decrease in belief about the incredible functions which microelectronic devices have and this image is multiplied by literature and movies;
- Barriers connected with a foreign language – specialist software or websites about a certain issue are most often in English which makes it impossible to make best use of the applications and knowledge systems the internet presents;
- Lack of ability to properly use the software – this is especially observed among users of a low level of advancement;
- Fear of humiliation and being discredited in front of other people. This is one of the most common problems which lead to the withdrawal of potential users of new technologies from participation in organized training. The situation occurs when a person does not have support from the those around them or is even discouraged

from education and when the participants of the course do not know each other very well, and their skills are at a different level;

- A lack of belief in one's own abilities derived from earlier educational failures.

In order to present the ideal educational model of older people, it is difficult to indicate the only right solution since there is no such solution in the process of educating seniors in the area of information technology. During the preparation of the proper model, the most important thing to consider is the awareness of the educator who presents the lectures concerning the specifics of the bio-psycho-social operation of seniors and the possibility to choose participants in a chosen group with consideration given to the homogeneity of their individual features and their level of advancement in computer use. Moreover, the educators should adjust the learning and teaching style to the preferences of adults.

To summarize, creating the new methodology of teaching seniors through generating a homogenous model is a complex process which demands the consideration of many variables. Additionally, some factors included in the model have many vague elements which should be clearly determined (e.g. learning and teaching styles). Thus, the question is whether it is reasonable to continue the search for the ideal state. This question seems to be valid, when in the education market there are more and more institutions dedicated to educating seniors in the area of information technology, and lecturers work in accordance with the intuition and experience they have gained during lessons with other age groups. Currently, in Polish andragogy and gerontology literature, there is a lack of unambiguous solutions in the area of detailed methodologies, despite the development of the information society, progressive demographic changes, and the development of senior education. Creating concepts of senior teaching models in the area of IT and research on the relationship between their factors put knowledge in order, whereas its integration favors the improvement of effectiveness in gaining skills and knowledge.

Self-education

Currently, in the area of teaching adults, what is more often underlined is the role of non-formal and incidental education. This is a result of the rate of change that determines the adjustment of a person to their surrounding reality. Moreover, andragogy environments more freely postulate the change of paradigm from teaching to learning. Learning in this case is not only a necessity, but becomes an internal part of everyday functioning which stimulates constant development (Konieczna-Woźniak 2010, p. 67) during the realization of professional and family goals or the fulfillment of one's own dreams and hobbies.

Just a few years ago, adult self-education was an issue poorly developed in Polish andragogy literature, except for a few theoretical papers and research connected with people in early and late adulthood (Semków 1986). Despite the fact that all the reports of UNESCO indicate the necessity of self-education as a crucial element in discovering reality,

the analysis of the adult education system was limited to underlining the significance of the learning process. The term senior self-education did not appear in the subject literature. The characteristics of practice and theory were limited to institutions that performed tasks in the form of lectures, seminars, and academic exercises conducted by universities of the third age, country universities, open universities, local clubs, and associations.

Currently, self-education in adulthood, regardless of its early or late stage, is becoming a basic element of the lifelong learning strategy. Self-education, treated as the aware, intentional, and independent gaining of knowledge and skills, began to be treated from a theoretical standpoint in Poland because of such people as: W. Kozłowski, A. Dygasiński, K. Prószyński, H. Radlińska, L. Krzywicki, K. Wojciechowski, I. Jurgielewiczowa, W. Okiński, F. Urbańczyk, A. Kamiński, C. Maciarz, J. Kuźma, S. Pacek, W. Prokoپیuk, J. Pólturzycki, J. Semków (Matlakiewicz, Solarczyk-Szwec 2009, pp. 133–135).

The most important role in senior self-education, just like as in the case of traditional teaching, is fulfilled by a wide range of technical and social abilities which aim to improve the level of knowledge and the acquisition of new competences. This may take place due to (Matlakiewicz, Solarczyk-Szwec 2009, pp. 135–136):

- New media included in the richness of the internet web, where on many themes, websites, discussion forums, websites with tutorial videos one may have access to a range of precious information;
- Lectures and articles in the professional literature (also branch periodicals) gained in the framework of querying one's own home library resources;
- Solving incidental problems in everyday life.

Senior self-education may be supported or led by significant people, e.g. teacher or lecturer of UTW. Moreover, using books such as for learning a foreign language is a certain form of indirect self-education, since learners follow the path marked by the author of the book. It is self-education, as the last type of auto-education that demands intellectual maturity and the ability to perform a profound analysis of the surrounding reality and to order data in a systematic and structured way. Appropriate self-education is the most difficult type of auto-education which is gained during the whole lifetime and it begins in elementary school through the activation of self-control and self-evaluation by significant people.

Principles of education

In the process of teaching seniors, their teachers should consider certain standards of action which in didactics are called the principles of education. There is a range of typologies of educational principles, but the ones presented below are, according to the authors, the most important. These are the principles chosen and adjusted to the needs of teaching seniors by Suchy (2007), Skibińska (2008), Matlakiewicz and Solarczyk-Ambrozik

(2009) and completed by the authors of this text with the first four. It seems that the first four principles on the list are in adult didactics, with a special consideration of the education of older people, a foundation and they indicate the specifics of learning in old age.

The principle of individualization is based on the consideration of the individual features of the participants to the educational process in the adjustment of teaching methods, against needs and experiences. The principle is connected with objectifying the learning process by giving each of the seniors the basis for optimal learning and for becoming their own education manager.

The principle of independence, extremely underlined in adult didactics, refers to the assumption that the more mature the person, the more independence and autonomy he/she needs.

The principle of utility refers to the need of seniors to learn what is useful. Utilitarian knowledge, skills and competences, which may be used every day, determine the procedure of choosing the content. In the case of older people, the utility of knowledge is most subjective and derives from the individual need, is a consequence of choosing content adjusted to the diagnosed needs of seniors, most often connected with other activities from many areas of life.

The principle of frequent reference to life experience of seniors allows them to use their experience as a significant source of knowledge by making them aware of its value. The best example of this principle is in the biographical methods, where the history of the student's life is an excellent source of knowledge.

The principle of illustration is based on making references to terms, objects, and situations that are relevant to seniors. It is a certain assurance of the optimal presentation of content with reference to modern didactic sources.

The principle of content structure assumes shaping in the mind of an adult learner integrated knowledge through the proper choice of teaching content. Content structures should be constructed in such a way that will make it possible to cover all of the content during self-education.

The principle of high quality education derives from a serious approach to education, in which the role of learners is taken by seniors with their experiences and expectations. Education is an activity in which seniors involve themselves through their own choice, with inner motivations to reach success. This principle reinforces the perception of education in senior age as an activity just as valuable as formal education.

The principle of temporality derives from the delayed reaction time of seniors that comes with age. This principle suggests the need to dedicate more time to all the activities performed by seniors and to slow down the tempo of work, adjusting to the needs of the learners. This principle refers greatly to issues which demand good hearing, good vision, and quick reactions and the processing of stimuli, thus lectures connected with new media, foreign languages, and motor activity.

The principle of consideration of physical and health condition of seniors means taking special care of educational conditions (safety during lectures) and taking action in accordance with the principles of intellectual work hygiene and creating educational comfort through the maintenance of the appropriate atmosphere.

The principle of aware and active participation is realized on the basis of the method in which the senior makes attempts to independently determine a solution to any given problem based on their own information sources. In this case, the teacher aims at encouraging activity among seniors (e.g. by presenting problems to be solved independently); moreover, the teacher creates the conditions for co-operation in the group. This is connected with the principle of independence, since seniors build working methods by completing activities on the basis of problem-solving learning and independence with the help of the educator.

The principle of adjustment of the language to the audience is especially important when people are taught who wish to gain certain information and skills. During education on using a computer the language should be illustrative, and not overloaded with recondite terminology. In the case of lectures of a specialist character e.g. psychology, the level of language abstraction should be adjusted to the cognitive capacity of seniors. It has been observed that spontaneity and natural behavior, including the concrete-illustrative presentation of topics among UTW students, is better received than typical academic lectures with the use of subject terminology.

The principle of considering emotional influences on the learning process. Emotions are considered the main factor which favor and hinder activity. It may happen that during education, seniors feel some sort of discomfort. This may be the result of unfavorable experiences at earlier stages of their educational path, e.g. contact with an unprofessional educator. Without doubt adequate forms of teacher contact with an adult learner, including teaching culture, determine the positive approach of seniors towards the didactic process.

The principle of general integration derives from the need to perceive the world not so much in the context of distinguished subjects or, like at a UTW, area of interest,

but from problems that a person faces. The senior education process should therefore present the best possibility to integrate knowledge gained in life, including the variety of dependencies and connections between the content of teaching which depict aspects of the surrounding reality.

The principle of error probability derives from the lack of possibility to plan and realize didactically-ideal activities. The didactic process is extremely dynamic. Additionally, each of the participants is characterized by educational habits and dissimilar relationships within the group. Provided that the educator cannot anticipate everything, the unofficial part of the lesson should be planned which is often unwanted from an organizational point of view. People who present exercises and lectures for seniors are not able to foresee all the consequences connected with activities. However, what is most welcome is the creation of the best conditions for education, the application of methods across the spectrum, and encouraging reflection on the activities in order to anticipate errors.

The above-mentioned principles of education are derived from traditional didactic principles and are only a selection of principles which reflect the specifics of teaching seniors. The development of principles of education based on further analyses and research aiming at improving the teaching effectiveness seem to be necessary.

Conclusion

Among the earlier-mentioned principles of education, it is worth mentioning that the learning itself, treated as the acquisition of knowledge and skills, is an issue significantly correlated with the stimulation of seniors to maintain their independence and supporting them through education with the simultaneous consideration of extended personal development. Goals constructed in this way refer to the specifics of senior education, and thus to the detailed methodologies which constitute a set of principles typical for andragogy and geragogy.

When analyzing the methodology of teaching seniors, it should be considered that it is a relatively new research area as evidenced by the insufficient number of guides to methodology which give instruction on how to teach seniors new media, foreign languages, art, the humanities, and social subjects. Many educational activities (e.g. realized in the framework of grant programs) and regular lectures e.g. at the above-mentioned universities of the third age led by teachers who base their activity only on intuition and experience from traditional school didactics. All in all, one can easily justify the preparation of detailed methodologies in Poland, dedicated to the growing number of people who support senior education, since this will lead to the constant improvement of teaching quality at the final developmental stage of life.

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