VYTAUTAS MAGNUS UNIVERSITY

Dalia STANIULEVIČIENĖ

# THE REFLECTIVE EXPERIENCE OF ADULT LEARNING TO LEARN

Doctoral Dissertation
Social Sciences, Education (07S)

Kaunas, 2014

UDK 374.7
St-71

The dissertation was prepared at Vytautas Magnus University, Faculty of Social Sciences, Department of Educational Sciences during 2010-2014.

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ISBN 978-609-467-078-7

VYTAUTO DIDŽIOJO UNIVERSITETAS

Dalia STANIULEVIČIENĖ

# SUAUGUSIŲJŲ MOKYMOSI MOKYTIS REFLEKTYVIOJI PATIRTIS

Daktaro disertacija

Socialiniai mokslai, edukologija (07 S)

Kaunas, 2014

Daktaro disertacija rengta 2010– 2014 metais Vytauto Didžiojo universitete.

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# INTRODUCTION

The twenty- first century is a "learning century with new vision, new implication and new roles for people" with the "understanding and creating the conditions for a true Lifelong Learning Society so that both the nation and the people prosper economically and mentally" (Longworth, 1996; Longworth, Davies, 2003). "Adult learning and education are an integral part of lifelong learning, which includes all modules of learning and education along the learning pathway" (Global Report on Adult Learning and Education, 2013, p. 40). In this perspective the learning to learn competence is essential for adults.

**Relevance of the topic.** The development of the European education area is more than a formal process and involves a significant transformation of the contemporary teaching-learning model. Due to considerable changes in the labour market, study programmes should become a tool that learners of any age could use to facilitate their effective participation and involvement in the contemporary knowledge society.

The concept of a lifelong learning society is changing, i.e. the idea of a knowledge society or learning society is closely related to the idea of viewing science in a wider context. In the context of lifelong learning, individuals should be able to manage and renew their own knowledge, to choose what is most appropriate in each context, to learn continuously and to understand how they could apply the knowledge they gain in new and continuously changing situations.

Equal opportunities, social cohesion and active citizenship are highlighted as priority goals in society today. Therefore it is important for all citizens to improve their skills and develop the competence of learning to learn which is essential when looking for work, staying in the labour market and pursuing lifelong learning that encourages active citizenship and dialogue among different cultures. A lack of education should be reduced by using high-quality involvement in the process of learning. (Competence–based learning, 2008, Education and Training 2020, 2009).

In this context, learning to learn is perceived as the ability to pursue and persist in learning, to organise one's own learning, including effective management of time and information, both individually and in groups. "Learning to learn engages learners to build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts: at home, at work, in education and training" (Key Competences for Lifelong Learning, 2007).

Researchers of the assumptions and environments of lifelong learning to learn (Boud, 1997; McGill, 1998; Barnett, 1997; Merriam, Cafarella 1999; Jarvis, Hoford, Griffin, 1998;

Knowles, 1980; Kolb, 1984; Long 1989) have built a solid base for further research focusing on the reflective experience of learning to learn in the paradigm of lifelong learning.

**Scientific exploration of the problem.** International research on learning to learn has helped to identify the significance of the learning to learn competence in an adult's life (Hoskins, Fredriksson, 2008, Hautamaki, 2002, Hofman, 2009, Taylor, Kloostermann, 2010, Hoskins, Crick, 2008). The competence of learning to learn (CLL) is a lifelong competence (Rychen, 2003, 2004). The following abilities are emphasised in learning to learn: setting learning goals and tasks; planning learning activities; activities dedicated to set tasks; reflecting on learning (self-evaluation). The project *Create – Motivate – Learn (CreMoLe)* introduced innovative ways for motivating adults to learn (Demirol, Steiner, Beck, 2011).

Research on learning to learn in the European context has concluded that further research is required in order to define the conception of learning to learn. Some suggestions include: further analysis of the conception of learning to learn, and focusing and aiming at a unified and consistent model of learning to learn. These ideas have encouraged the author of this dissertation to further analyse the conception of learning to learn through reflective experience in different adult learners' groups and to focus on the development of a coherent construct of adult learning to learn scenarios.

Learning to learn in the paradigm of lifelong learning covers diverse fields of learning and identifies learning opportunities at different ages throughout an entire life (Jarvis, 2002, Longworth, 2003; Intzidis, 2003; Olsen, 2004; Teresevičienė, 2001; Mickūnaitė, 2007, Gedvilienė, 2008, Zuzevičiūtė, 2008).

Nowadays, society and the learner identify different needs both when discussing what a person should know in this information age and how a person could and should learn (Fink, 2003, Dolence, Norris, 1995, Wirth, Perkins, 2008).

The specific learning experiences of seniors are discussed by Duay, Bryan (2006, 2008), Rowe, Kahn (1998) and Schaie (1994), while Glass (1996) and Sisco (1991) draw attention to learning through cooperation in small groups and highlight the importance of social relations and interaction. The advantages of independent learning among adults are emphasised by Kim, Merriam (2004), Martin (2002) and Duay, Bryan (2008). Attention is also drawn to searching for new learning forms that make education meaningful (Wirth, Perkins, 2008, Fink, 2003, Ileris 2003, 2009).

It would be beneficial to conduct more comprehensive research, focusing on learning to learn from the perspective of different disciplines and social environments. Such research would improve the understanding on what pedagogical methods and learning environment are

to be used for the development of the competence of learning to learn (Fredriksson, Hoskins, 2007, Demirol, Steiner, Beck, 2011).

**Research problem**

A market society is a risk society. A person has to abandon some of his/her identity and become someone else. However, continued conflict between a person (his/her mind) and the surrounding world becomes a problem when essential and irreversible changes happen within a society. A learner finds it difficult to manage a considerable amount of information on his/her own. Researchers also express their concerns with dualism, i.e. relations between individuals and their social environment (Wirth, Perkins, 2008, Fink, 2003, Ileris 2003, 2009).

Problems often lie in the fact that it is impossible to provide learners with clear references and instructions on how to behave in particular situations.

Research problem of this dissertational research is based on the fact that different learning to learn scenarios can be applied in different situations. A learner's behaviour differs in different situations. Thus learners are faced with both personal and social problems if they do not know how to behave in a particular situation. In reality, not all adults fully enter into the constantly changing society of this period and remain its members in a full sense. This depends on their learning to learn competences and significant personal, professional and social activities.

In order to encourage learning as a lifelong process with adults in the education world, it is very important to have as much information as possible about the best learning methods, forms, and other aspects of the learning process. Currently learning to learn is understood in too simplistic a manner and is applied in the same way to groups of different ages, which is not correct. Learning to learn depends on a multitude of different factors, while at present learning to learn is understood in a single way and the fact that this process is a multi-aspect phenomenon is often ignored. Therefore the form of learning to learn has to be differentiated, and related to the learners' age, and the competences of learning to learn not seen simply in a schematic manner**.**

The reflective experience of adults helps to reveal the many facets of learning to learn; just as the process of learning to learn is many –sided, so too the competence of learning to learn is individual and depends on the age group of learners**.** Thus the reflective experience of adults in learning to learn helps show the different aspects of the process of learning to learn and differences in the competence of learning to learn.

The following questions are raised to solve this scientific problem:

1. What form does the expressive construction of adult learning to learn take?

2. How does the experience of learning to learn differ among adults of different ages?

3. How can learning to learn be encouraged at different age, seeking to making learning a lifelong process?

It is complicated to single out just one theory among the spectrum of different learning theories. However, after reviewing different research and comparing different authors' ideas, it is felt that attention should be paid to the following theoretical research approaches: personalism, pragmatism and constructivism. The practical research approaches used in this dissertation highlight the importance of social constructivism in learning to learn.

In the dissertation, key trends of adult learning to learn are based on learning to learn scenarios (presented in figure 10 after adapting and modifying Dewey, 1997, Vygotsky, 1986, Kukla, 2000, Savin-Baden, 2000 ideas).

**Research object** – reflective experience of adult learning to learn.

**Research aim:**

To reveal the reflective experience of adult learning to learn, focusing on key dimensions of learning to learn important for the development of LLL (lifelong learning).

**Research tasks:**

1. To review theories about learning to learn and develop a construct of the competence of learning to learn.
2. To reveal the reflective experience of adult learning to learn by developing different learning scenarios.
3. To identify the connection between the competence of learning to learn and adults' personal, professional and social activity.
4. To highlight elements in the learners' learning to learn based on different activities in early adulthood.
5. To highlight elements in the learners' learning to learn based on different activities in middle and late adulthood.

**Theoretical novelty of the dissertation**

After comprehensive analysis of the experiences of adult learning to learn and learning scenarios that reveal these experiences, the author of the dissertation introduces a construct of reflective experience of adult learning to learn that focuses on key components in learning to learn. This is what makes the dissertation theoretically significant.

**Practical novelty of the dissertation**

The practical significance of the dissertation is manifested through the applicability of the model of learning to learn scenarios. This model is a construct for the further development of a module of practical learning to learn for adults of different age groups.

**Theoretical research provisions:**

**Personalism** emphasises human individuality and uniqueness. In this approach, the individual is the primary structural value, having in the mind new technologies, cultural and political ideologies in our society.

William Stern wrote, in his introduction to *Person und Sache* (vol. 2): "Despite any similarities by which persons are identified as members of humankind, a particular race or gender, etc., despite any broad or narrow regularities which are involved in any personal events, a primal uniqueness always remains, through which every person is a world of its own with regard to other persons." "...United and indivisible individual uses his freewill for self-determination that is then applied to realising own goals" (Plėšnys, 2011, p. 151, 152). However, according to the author, the human being is also a social being living among other humans. Individuals realise themselves only through relations with other people.

Autonomy, the desire to be with other people and commonality are important aspects of discussions on adult activity and learning to learn (Popper, 2001, Plėšnys, 2011).

However, humans act in order to achieve their goals. The theory of **pragmatism** contends that thinking and knowledge are instruments of activity that help a human to achieve his/her goals. Adults learn to learn through their entire life. Learning is a continuous process where learners learn from life itself. Continuous learning helps individuals to develop and improve both socially and intellectually. According to the authors (Dewey, 1997; Patzold, 2011; Calcaterra 2011), this development is an educational outcome that enables an individual to assimilate each new experience and, as a result, improve his/her actions and beliefs.

In examining the ideas of **realism** when discussing adult learning to learn, an important point is that realists emphasize responsibility, the encouragement of competence and questions of visual learning (Ozmon, Craver, 1996). These remain important so that realism has not lost its validity even in this period today as it supports scientific progress, which makes the learning process more multi-faced and more attractive to people in different ages.

**Methodological research provisions:**

**The theory of constructivism** states that the learner is an active participant in the process of cognition. A learner learns through actions; furthermore, experimentation helps a learner to achieve his/her goals. A learner learns to learn through experimentation. The authors emphasise the significance of learning through actions (Dewey, 2000, Mažeikienė, Lenkauskaitė, 2011).

**Social constructivism:**

Knowledge acquisition and mobilisation is an outcome of the process of active constructing and thinking. From the perspective of social constructivism, knowledge is

acquired when people get socially involved in a conversation or action related to their projects or problems. In this case learning can be separated neither from culturally transferred understanding nor from discussion of the world and reality (Merriam & Caffarella, 1999, p. 262).

**The following scientific research methods are used in the dissertation**

**Analysis of Scientific literature** is used to validate the conceptions of adult learning, focusing on the features of the competence of adult learning to learn in the LLL context. An adult learning to learn construct is introduced.

**Structured survey – questionnaire** helped to reveal the situation of adult learning to learn in Lithuania as part of the national quantitative research.

**Focus group interviews have** highlighted the reflective practice of adult learning to learn. Senior adults provided reflective assessments of their learning to learn.

**Content analysis** was used for qualitative data management, while analysis of descriptive statistical data and statistical correlation were applied in quantitative data research.

**Structure of the dissertation**

The dissertation includes an introduction, a list of figures (63), a list of tables (18), a list of concepts, three body parts, a discussion, conclusions and recommendations, 210 literature sources are cited. Instruments used in the course of the research are listed in the anexes. The overall size of this work is 53338 words.

**Approval of the results of the dissertation research**

**Publications**

1. Gedvilienė, G., Staniulevičienė, D., Gridel, C. (2013). Strengthening Social Cohesion : Adult Learning through the Practice of Volunteering // Socialinis ugdymas. Vilnius: Lietuvos edukologijos universitetas. ISSN 1392-9569. 2013, nr. 22 (33), p. 86-97. [SocINDEX with Full Text (EBSCO)]

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**Presentations in the scientific conferences.**

1. Gedvilienė, G., Staniulevičienė, D., Gridel, C. (2013). Adult Learning through Participating in Volunteering Practice // Rural environment. Education. Personality (REEP): proceedings of the 6th international scientific conference, March 20th-21st, 2013, LLU, Jelgava, Latvia / ed. V. Dišlere. Jelgava : LLU, 2013. ISBN 9789984480794. p. 193-199.

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## CONCEPTS

**Adult** - a person who is fully grown or developed (Pearsall, The New Oxford Dictionary of English, 2001).

**Adulthood –** the period of the adult phase, usually divided into three parts: early (approximately 25-40 years), middle (approximately 40-65 years) and late (approximately 65 years to death) (Navickas, Vaičiulienė, 2010).

Three main periods of the adult phase of development, modified by the author of this dissertation: **Early adulthood** 18-35; **Middle adulthood** 36-65; **Late adulthood** 66+

young adult (18-35) years old; middle adult (36-65); old adult – (66+) (modified according Jovaiša, 2011).

**Dimension –** an aspect or feature of a situation (Pearsall, The New Oxford Dictionary of English, 2001).

**Experience** - practical contact with and observation of facts or events; the knowledge or skill acquired by a period of practical experience of something, especially that gained in a particular profession; the observing, encountering, or undergoing of things generally as they occur in the course of time (Pearsall, The New Oxford Dictionary of English, 2001).

**Lifelong learning (LLL)** – all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective (Key Competences for Lifelong Learning. European Reference Framework, 2007).

**Learning to learn** is the ability to learn, to organize one's own learning, including effective management of time and information, both individually and in groups.

**Learning to learn** engages learners to build on prior learning and life experience to use and apply knowledge and skills in a variety of situations - at home, at work, in education and training (Key Competences for Lifelong Learning. European Reference Framework, 2007).

**Learning to learn competence** is understood as the ability to organize one's own learning and the effective management of time and information, both individually and in groups. Learners rely on prior learning, experiences in using and applying knowledge and skills in a variety of contexts - educational institutions, at work, at home (Key Competences for Lifelong Learning. European Reference Framework, 2007).

**Paradigm** - [gr. paradeigma - example]: theoretical and methodological assumptions, which are based on specific research, the whole (Gordon, Dictionary of British Education, 2004).

World view underlying the theories and methodology of a particular scientific subject (Gordon, 2004).

**Pragmatism** [gr. pragma (origin. pragmatic) - job action]: philosophical approach in which practical thinking and practices are key concepts and the criterion of truth is its practical applicability (Gordon, 2004).

**Reflection** – an active cognitive process involving sequences of interconnected ideas, paying attention to the importance of knowledge and belief (Shon, 1987).

Bubnys (2012) describes the different definitions of the term 'reflection', Lat. Reflex - turning, repositioning.

The semantic meaning of the word reflects the process of consideration, analysis, exploring inter-correlated processes, tools and context (Raines, Shadiow, 1995).

**Reflective** - relating to or characterized by deep thought; thoughtful (Pearsall, The New Oxford Dictionary of English, 2001);

Characterized by quiet thought or contemplation (Gordon, Dictionary of British Education, 2004).

**Reflective experience** - the observed, encountered, or undergone events which have occurred during one's life span, characterized by deep thoughts on the part of the participants (modified, using reflective concepts and experience).

**Reflective learning** is related to learning, lifelong learning, and is considered one of the essential assumptions prerequisite for the development of the ability to learn, which would allow for a clear awareness of one's own experience, to distance oneself from everyday events and ordinary things of reality (Bubnys, 2012, p. 14).

**Reflective practice** involves the internal testing and analysis of the problem or situation evaluating what has been learned from experience and how this will affect future experience and practice (Bubnys, 2012).

**Scenario** - a postulated sequence or development of events (Pearsall, The New Oxford dictionary of English, 2001).

# 1. THEORETICAL CONCEPTIONS OF ADULT LEARNING TO LEARN

Learning to learn is identified as an important (meta)conception in many learners' life spheres, marked by rapid changes. One participates in the learning process for one's entire life; thus lifelong learning (LLL) has remained relevant for decades. All learners act and try to achieve their aims differently. Every participant in the learning (to learn) process is an individual. As individuals, humans are also unpredictable. Thus in this study a learner is discussed through the perspective of personalism and activity. Learning to learn (in practice)) is analysed through the perspective of pragmatism and constructivism that help to better reveal the construct of adult learning to learn.

## 1.1. Ideas of Personalism when Reflecting Adult Learning to Learn

Every human is unique and individual. The philosophical approach of personalism perceives human beings as irreducible values. In personalism, a human being is defined as having free will and creative individuality: "The key idea of personalism emphasises the existence of free and creative personalities and at the same time states that these structures are characterised by the principle of unpredictability, preventing from any strict systemisation." (Neubert, Reich, 2006, Munjė, 1996, p. 33)

Personalism emphasises human dignity, value and freedom; its philosophers, in analysing a human being as a value, take into consideration new technologies, cultural and political ideologies that may lessen the importance of the individual. (Kėvalas, 2007, Buford, 2006).

"Spirituality is also an infrastructure. Psychological and spiritual disorders when combined with economic disorders can greatly minimise economic achievements". Further, economic structures that are implemented without taking into consideration human needs are doomed to failure. (Munje, 1996, p. 67).

The free market can also be perceived as an area of moral development. The idea of applying the theory of personalism to a free-market economy is reflected in the original and modern ideas of Pope John Paul II (1997). It could be stated that, properly perceived and promoted, a market economy is implicitly directed towards human development. The study "Person and Act" explains six concepts that the author uses when discussing personal acts, i.e.

self-possession, self-management, self-determination, transcendence, integration and participation (Wojtyla, 1997, Kėvalas, 2007, p. 207, Buford, 2006**).**

Self-possession, as used by Wojtyla (1997), can be defined as the "human power to bring all of the memories of the past and hopes for the future into the present in such a manner that one is fully present to oneself in the moment, not in a way that escapes into the past or the future, nor in a way that disregards one's connectedness to the past or to the future". Wojtyla identifies two concepts – "man acts" and "something happens in man". A person who is self-possessed is, according to him, capable of "self-governance", which involves the ability to bring rules and order to one's actions, to control desires and wishes and to make decisions.

The conclusion can be drawn that if a human beings can act consciously, they can also make decisions how to control themselves (or sometimes, how to not control themselves), to encourage themselves to perform certain actions, including participation in the process of lifelong learning.

The power of self-management defines the power of a person's self-determination. Self-determination can be described as a person's ability to act consciously, to understand his/her actions and their possible consequences. Human intellect and will enable individuals to act in this way.

Wojtyla's discussion of transcendence is not primarily about God but rather about personal transcendence enabled through human acts, i.e. transgressing one's limits when performing an act. One reaches out beyond one's limits and opens oneself up to external objects so that one could better understand their nature (horizontal transcendence) and at the same time reaches beyond oneself towards the interior of the self, i.e. to the depths of the person, towards the highest values (vertical transcendence). Thus it can be acknowledged that a human act is free if a self-governed person can make self-determined decisions. However, it is also clear that if one forms oneself through actions and, as a result, becomes one's true self, this is done by one's free will to act following truth. A link between human freedom and the truth about humans can be noted here (Kėvalas, 2007, p. 208, 209).

The idea that by acts one can transcend oneself is not complete, as this act has to be integrating, i.e. realising humanity. Otherwise, a chosen act might be destructive for a person. Being human is an aim for each person. Every human act is either an integration of humanity or not so a certain act might better express a person and reveal his/her authentic humanity through integration.

Discussions on human action also focus on participation, i.e. acting with others. When acting together with other people, one not only maintains the personalist value of one's action but also brings it into action with others (Wojtyla, 1997, Kėvalas, 2007, p.209, Buford, 2006).

Thus discussions on learners' acts in the learning to learn process emphasise the concepts of self-possession, self-management, self-determination, transcendence, integration and participation. The author of this dissertation believes these concepts to be important when analysing and validating the concept of the competence of learning to learn. According to these ideas, each learner is free and makes decisions both when acting and learning. A learner participates in activity; however, at the same time certain processes happen in the learner him/herself. Thus processes can be defined both as internal and external. They are discussed further in the work when analysing key spheres in adult learning to learn.

Furthermore, the processes of "man acts" and "something happens in man" are highlighted, being unique and individual to every learner, especially when discussing adult learning to learn abilities at different age. Without a doubt a person seeks to obtain benefits both when performing an action and learning. Thus the ideas of pragmatism are important when revealing the reflective experience of adult learning to learn.

### 1.2. Pragmatism in the Context of Adult Learning to Learn

Pragmatism is a philosophical tradition contending that all philosophical topics are best viewed in terms of their practical benefit. In pragmatism, the structures of thought are analysed through scientific methods with the aim of applying them in practice. The emphasis in pragmatism is put on joining theory and practice. The classical concepts of pragmatism are associated with Peirce's principle, James' conception of truth, Schiler's humanism and Dewey's instrumentalism. Pragmatism is the philosophy of pure experience, stating that reality cannot be substantial, fixed or complete. It is perceived as dynamic and pluralistic, as the flow of our consciousness, as experience whose data a person organises in the way that best suits him/her and, as a result, creates reality him/herself and provides individual certainty. Thus the world is plastic. It is not complete and cannot be put it into any scheme. There is always room for creativity in it. It is a pluralistic world (Džeimsas, 1995, p. 10).

Pragmatism is both a key philosophical approach and a specific approach in the philosophy of education. When associated with the above aspects, it could be considered as constructive reflection on the philosophy of idealism. Idealism is to some extent related to European philosophy while pragmatism is the American input into philosophical discourse.

Pragmatism is also related to constructivism. Dewey views learning as part of growing up, which is an essential human possibility (Patzold, 2011, Calcaterra 2011).

John Dewey's instrumental pragmatism focuses on humans and their problems (Plėšnys, 2010). Experience is one of key concepts used by Dewey. He believed that

experience can both help and harm a human being when fulfilling expectations. “Experience consists of a number of problematic situations that a person aims to define and solve” (Plėšnys, 2010, p.123).

Pragmatism validates the importance of lifelong learning which is one of key elements of the contemporary policy of adult learning (Kuncaitis, 2009).The experience of learning to learn is of high importance when supporting these authors’ ideas and discussing the concept of learning to learn in the LL context. Thus “a just research method would be an instrumental method when each time everything is started from the beginning, focusing on moving forwards and applying the trial and error method” (Plėšnys, 2010, p.123).

Supporters of pragmatism emphasise the importance of both practice and experience. Thus it can be stated that successful learning to learn requires making the right decisions. A person can face problems when making decisions; however, it is through trying (i.e. practice) that a positive result can be achieved. Present and new knowledge help a learner to achieve results. It is also important to test acquired knowledge in practice and select tools that help to achieve aims.

In the process of learning, learners are faced with the issues of persistence and flexibility, involving interacting and communicating with a teacher, and, at the same time, knowing when to let go of excess baggage of knowledge (Megginson, Clutterbuck, 2005). Through communication with learners, a teacher, lecturer or practice supervisor encourages them to complete tasks and strive for something, as their learning outcomes (benefits to learners) depend on whether they can do this. On the other hand, a teacher, lecturer or practice supervisor should be able to realise when to stop and not provide a learner with new knowledge, enabling them to act on their own. Such a transition is important to learners and their teacher, lecturer or practice supervisor. The process is also rather subtle as everything depends on both the learner and the teachers, who cannot make decisions easily if they see that a learner is not ready to act independently.

According to Dewey, experience cannot be rendered directly, without a learner getting involved in the process of its construction.

Summarising the ideas of pragmatism in the context of adult learning to learn, it is important for a learner to use different learning and activity methods and to combine theory and practice in knowledge construction, where the learner’s experience plays a key role (Merriam, Cafarella, 1999). Activity scenarios are unique for each individual in the context of LL (lifelong learning). Pragmatism used in this dissertation can also be referred to as “intellectual behaviourism (empiricism)” that Dewey adapted in pedagogy by developing the trend of problem-based learning (Pukelis, 1998, Patzold, 2011).

Three key principles are considered to distinguish problem-based learning from traditional learning: a problem acts as a stimulus to learn; it is an educational and learner-oriented method. Problem solving is the essence of problem-based learning. During this process a learner acquires problem-related integrated knowledge and develops problem solving skills. Problem-based learning is a circular process, i.e. when applying acquired knowledge in practice, the learner is faced with new problems. This is how the circle of problem-based learning moves forward (Savin-Baden, 2000, Švetkauskas, 2005, Mažeikienė, Lenkauskaitė, 2011).

In the process of activity, problem-based experience and learning begins when problem-based questions arise. At the beginning, a problem might be perceived one way and a learner may be wrong. However, the comprehensive analysis of every problem provides new insights and new problem-based questions. This analysis seeks comprehension when discussing problems in the context of different experiences. It is important to step back and not only look at a problem from an individual perspective but also to look at the situation as a whole. Discussions on learning to learn should answer all questions in detail. The appropriate method used at the appropriate time would help to answer all these questions. Meanwhile, it is important not to forget when observing, listening and participating that one is surrounded by other unique and unpredictable people. This aspect is emphasised by the philosophy of personalism. Dewey (2013) also noted that everyday life is a world where all philosophical and social decisions have to be tested.

The learning to learn process focuses on purposeful actions. When pursuing a goal, a person faces different obstacles. In order to overcome them, one needs to think. Failures start when an individual is faced with problems. The latter are, according to Dewey, stimuli of everyday thinking. He defined thinking as a process: 1) that is prompted by a person's relevant experience; 2) during which diverse solutions are discussed; 3) which analyses and generalises relevant data; 4) a hypothesis of acting is formulated; 5) a person acts according to this hypothesis; 6) results are used to test the purposefulness of acting. If the link between an idea and its corresponding action as well as the outcomes of the latter are relatively significant and provide experience that can be useful in future, then it can be stated that educational experience is gained during problem-solving.

This dissertation also applies pedagogical aspects of educational philosophy (Pukelis, 1995). The author of the dissertation believes that these philosophical aspects are appropriate in the context of reflecting on the learner's activity.

As a participant in the process of teaching/learning in practice, a lecturer, teacher or practice supervisor uses actions and raises questions to direct the learner's actions. The teacher

should be able to not only know the learner's nature, set educational aims but also to make the learner believe that this activity is significant, i.e. intermediate aims should be used to direct a learner towards the final aim that corresponds to a teaching/learning aim.

It could therefore be generalised that, through pedagogical acts, a teacher helps a learner to find an appropriate action and perceives changes in personality. Once feedback, one of key signs of successful teaching/learning, is received, the teacher makes a new decision, a new pedagogical act to direct the learner towards looking for a solution and towards successful individual learning, i.e. moving from the process of teaching to the process of learning.

The author of this study believes these philosophical conceptions (the philosophical approach of personalism; pragmatism; Dewey's problem-based learning; pedagogical aspects of educational philosophy) to be significant for this dissertation as the combination of these ideas can be successfully used to consider the competence of adult learning to learn in the LLL paradigm.

The author bases her research methodology on the theory of social constructivism. However, social realism theory is no less and perhaps even more significant than constructivism in researching learning to learn (Bernstein, 2000; Young, 2008).

### 1.3. Social Realism Theory and the Reflective Experience of Adult Learning to Learn

Social realism theory stresses such central issues as the "knowledge of the powerful" and "powerful knowledge" (Young, 2008). It should be highlighted that "education has a social specificity of its own that centres on the conditions for the acquisition of knowledge that can never be reduced to politics, economics or problems of administration" (Bernstein, 2000). To explain the importance of knowledge, using the ideas of social realism, it is important to mention issues of social, educational and justice. The theory of social realism offers new possibilities for people seeking knowledge and the acquisition of powerful knowledge. Bernstein offers ideas about the differentiation of knowledge and emphasizes the structure of knowledge (Young, 2008). In this case, when referring to the concept of the vertical, one is speaking about how theory is created. In regard to a hierarchal structure of knowledge, verticality expresses itself in a range from the integration of statements to the formation of knowledge. This resuls in a kind of triangular form. Horizontal knowledge covers a wide diapason. Such knowledge lines up a selection of equivalent and unequivalent concepts. Verticality in horizontal knowledge structures appears not through integration but through the presentation of new concepts.

When he compares these scholars' ideas about knowledge and its application, Young (2007) asserts that Durkheim and Vygotsky have one thing in common in discussing knowledge: knowledge is the result of mankind's historical development, the outcome of the actions of women and men on this earth. Another feature emphasized by both scholars is that acquiring knowledge and passing it on are the most important features in rearing children and provides powers to those who are learning. This is because humans are capable of taking in knowledge, respond to knowledge and also create new forms of knowledge. Therefore these authors theories about knowledge is also known as their theories about society and social change. As Young states, "Durkheim's theory of knowledge is based on an idea of social structure, Vygotsky's theory is based on the idea of social activity" (Young, 2007, p. 45). Young considers the question about what is believed about knowledge when when one looks through the eyes of different authors: "knowledge as given" and "knowledge as reducible to social practices". Both Durkheim and Vygotsky choose a"social realist approach to knowledge" (Young, 2007, p.45).

It can be stated in summarizing these authors' ideas that each of them in their works has a different understanding of social realism when one refers to knowledge: Durkheim's theory of knowledge is based on social structure, while Vygotsy's theory emphasizes the notion of social activism. However, it is clear that these authors accent social realism, which is important for this doctoral work when it speaks about adult learning to learn, as social realism grants new possibilities in seeking and gaining knowledge.

In examining the ideas of realism when discussing adult learning to learn, an important point is that realists emphasize responsibility, the encouragement of competences and questions of visual learning (Ozmon, Craver, 1996). These remain important so that realism has not lost its vitality even in this period today as it supports scientific progress, which makes the learning process more multi-faceted and more attractive to people of different ages.

### 1.4. The Manifestation of Adult Learning to Learn: Circle of Learning

Modern competences involve not only a learner's knowledge and skills but also personal, professional and public features and the ability to act appropriately and flexibly in well-known as well as in previously unknown situations. In order to stay up-to-date, the concept of learning has a wider meaning; thus traditional learning theories are looked at from different aspects. Iller (2003) bases the theory of learning on two key preconditions. First, learning is a process that consists of interaction with an outer world, the learner's and his/her social, cultural and material base, as well as an inner psychological process where an important role is played by

knowledge related to previous learning. Second, learning involves three dimensions, i.e. the aspect of cognition (knowledge and skills), the emotional dimension (feelings and motivation) and the social dimension (communication and cooperation in social contexts).

One of the factors of success in a knowledge society is the ability to learn by quickly adapting to changes arising due to technological development. Changing social needs in the context of globalisation require individuals to be able to learn and adapt to changes, to stay in the labour market in order to avoid social exclusion and to be full members of the society.

Thus in order to adapt, learning to learn is very important in the context of lifelong learning (LLL). For citizens to adapt to changes, the development of the learning to learn competence has become a key part of the LLL process in any learning environment (formal, non-formal or informal education) (Fredriksson, Hoskins, 2007).

Attention should be drawn to a learning model proposed by Iller (2009) (Fig. 1). This model emphasises the process of the learner's interaction with the outer world. In Fig. 1, the learner is presented at the top and the environment at the bottom; they are joined by a continuous line, as this relation is very important in the process. Another double arrow indicates the importance of the psychological process in the process of learning. This is already an inner process, happening when a learner learns. Emotional and cognitive dimensions are joined by a double arrow, indicating knowledge acquisition by joining two poles, i.e. cognitive and emotional. Thus three key areas (environment, cognitive and emotional) form a triangle, which becomes important when explaining the aspects of learning.

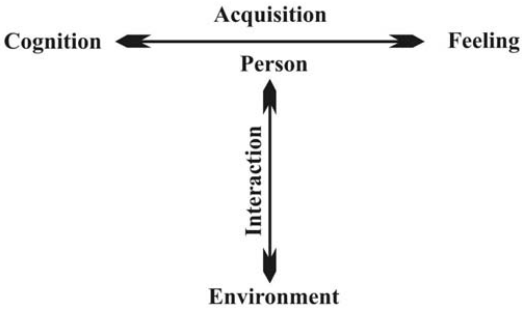



*Fig. 1. Key processes of learning (Iller, 2003, 2009)*

In this dissertation, the analysis of the dimensions of the learning to learn competence is based on Iller's (2003, 2009) idea of key aspects, explaining the importance of adult learning in the process of learning to learn.

**Cognitive dimension** is the dimension of a curriculum that can be defined as knowledge and skills developing the learner's understanding and abilities. A learner aims to develop

meaning and deal with practical life challenges and, as a result, develop his/her own comprehensive functionality.

**Emotional or psychodynamic** dimension involves mental energy, feelings and motives. Its main function is to ensure that the learner's mind is balanced and, at the same time, that individual sensibility is developed. These two dimensions are always initiated by impulses from the process of interaction and are integrated into inner processes of learning and development.

To validate the conception of learning to learn, attention should be drawn to cognitive psychology and social culture paradigms. Traditionally, the cognitive psychological approach analyses how learners cognise by acquiring knowledge. The social / cultural perspective also analyses how knowledge is built and how social processes are related to learning.

In reality, the analysis of learning to learn focuses on questions based on both cognitive and social cultural traditions.

However, the question arises whether these tests (e.g. TIMSS - Trends in Mathematics and Science Study, PIRLS - Progress in International Reading Literacy Study, PISA - Programme for International Students Assessment, mentioned by Hoskins, Fredriksson (2008)) were really conducted to evaluate learning to learn. International research was performed to evaluate learners' knowledge and skills in such spheres as reading and arithmetic. Scientists claim that this research might be more related to learning to learn skills; however, they did not aim to evaluate learning to learn itself (Demirol, Steiner, Beck, 2011).

The competence of learning to learn is defined as learning to learn, as the learner's ability to independently set learning goals and plan learning steps accordingly, to independently or in cooperation with other learners look for relevant learning-related information in different resources, to solve problems, self-critically reflect on the process of learning and assess progress (Leonavičius, 2008).

The following abilities are identified by Leonavičius (2008): setting learning goals and tasks; planning learning activities; carrying out activities directed towards set tasks; reflecting on learning (self-evaluation).

**Setting learning goals and tasks.** Successful learning outcomes are partially determined by the goals that learners set themselves. Learner can set learning goals when they understand what has to be achieved and implemented. This is when a set goal becomes "the property" of a person that determines responsibility and independence. Once a learning aim is perceived, it becomes easier to set actual learning tasks that help achieve the goal.

**Planning learning activities.** This ability involves planning one's learning time, creating a learning environment, and choosing appropriate learning tools and strategies. When

organising learning, adult learners try to plan their time effectively, spending time on each set activity, and choosing the best time for both learning and rest. It is also important to have a learning environment that is both physically, socially and emotionally, as well as psychologically clean and tidy. Certain alternative learning environments might be chosen, such as nature, theatres, museums or virtual learning environments. Adults choose different learning strategies and then set their learning goals and choose learning styles accordingly.

**Activity directed towards set tasks.** When learning different subjects, individuals are advised to relate them to their present knowledge and experience, and to link learning material to real life examples. Learning to learn requires adult concentration, attention and persistence. Learners are advised to select several different learning resources (not only books); to use various sources – search for information, choose, systemise and critically evaluate it. Adults also learn to learn not only individually but also in a group or in pairs.

**Reflection on learning (self-evaluation).** Learners should be able to self-evaluate whether learning goals were achieved, which were most successful and what they were not able to achieve. They should try to identify reasons for their failures and to find out what could have been done differently.

Various learning strategies help to develop the competence of learning to learn. Those participants who are not aware of or do not apply learning strategies often learn passively and experience difficulties. Learning strategies are defined as:

- methods applied by learners in learning;
- ways to acquire abilities;
- methods used to develop abilities;
- ways to achieve set goals;
- sequences of steps that help to perform complicated tasks.

Abilities of the learning to learn competence:

- Setting learning goals and tasks.
- Planning learning activities.
- Activity directed towards set tasks.
- Reflection on learning (self-evaluation).

Looking through the prism of different learning theories, it might be difficult to highlight one precise theory. However, the analysis of research and comparison of different authors' ideas has revealed the importance of constructivism in this research.

Further, the approaches of different learning theories to certain dimensions are provided. In addition, an overview of the process of learning to learn, description of the learning place,

learning goals, and manifestation in adult learning are discussed through different theories. This leads to social constructivism emphasised in this dissertation.

The process of learning is complex not only from the psychological dimension but also from social perspective. The elements of context introduce the key factors that provide a better understanding of a person's learning. The learning experience is a social process. Dewey's constructivism emphasises the idea that learning is the development of abilities in an individual's society which is understood as an intelligent response (through thinking and questioning) to external challenges or complex contexts. Learning theories provide information schemes for better understanding learning processes by setting paths and conditions that enable adults to develop their ability to act and express themselves (acts and expressions). From the sociological perspective, Belanger (2011) emphasises the existence of different forms and levels of participation in adult learning activities, as well as factors setting different participation guidelines.

The competence of learning to learn is defined in scholarly resources as a strategic and flexible use of learning corresponding to goals and based on adult learning recognition and the acquisition of learning itself (relating new information to the scheme present in one's mind and using it for developing a new scheme) (Competence-based learning, 2008).

Mastery of this competence is closely related to maturity, confidence, self-criticism, tolerance of frustration, flexibility, and adaptation to changing situations. This involves the following values: desire for knowledge, control, value, self-respect, self-education, competence, accepting one's drawbacks, personal development, exploration, etc.

A group of scientists who discussed the benefits of learning to a learner expressed their concerns about whether courses are interesting and science is useful and valuable enough. The situation is worrying, as learners do not perceive science as value but rather concentrate on the result (their mark). They search for new forms of learning that give meaning to science (Wirth, Perkins, 2008, Fink, 2003, Iller 2003, 2009). This situation is relevant to a number of members of the society: both to young and older learners, businessmen and the unemployed.

Summarising authors' thoughts, "critical competences" should be emphasised (Gardiner, 1994, Wirth, Perkins, 2008). According to them, the following competences are important to all citizens and those who participate in the process of learning:

- personal responsibility
- ability to behave ethically
- abilities in oral and written communication
- interpersonal and team abilities
- critical thinking and problem solving abilities

- respecting people's differences
- ability to change
- lifelong learning ability and pursuit

Nowadays, society and learners emphasise different needs when discussing what a person should know in the information age and how a person could and should learn (Fink, 2003, Dolence, Norris, 1995, Wirth, Perkins, 2008). With these changes in mind, the role of teaching personnel is also changing. Transition from teaching to learning involves moving away from the role of a reader of lecture material to the role of a creator of learning material and a learning environment. (Bar, Tagg, 1995, Fink, 2003, Wirth, Perkins, 2008).

Other researchers perceive science as a value: "knowledge is one of the most important values and ability to learn is one of the most important skills in our society" (Rožman, Koren, 2013, p. 1212). Research that involved learners' surveys on their learning goals have revealed that learners emphasise five key objectives of learning.

Learners state that wider acquisition of new knowledge requires identification of already existing knowledge, provision of news at the global level and the ability to renew one's knowledge. In their opinion, it involves recognising new knowledge and understanding what they already know and, as a result, replacing or renewing old information with new. Learners identified the following methods as the most appropriate to achieve set goals: discussions with experts, various exercises, lectures and scientific literature studies (Hofmann, 2008, Leonavičius, 2013).

According to learners, they key aspect in pursuing knowledge is their ability to find knowledge and its resources. Learners believe that it is important to search for and read various scholarly resources and to have knowledge about information resources. Learners also acknowledged the importance of lifelong learning. Qualified staff, mentoring, meaningful tasks and access to information resources and scientific literature help learners to acquire high-quality knowledge.

Learners' thoughts support the idea that in order to achieve one's goal it is important to focus on research and scientific literature studies, as well as to perform written tasks, and actively participate in lectures and discussions (Hofmann, 2008).

Learners understand the importance of being able to share knowledge professionally. This aim could be achieved through the examples of good practice that they receive from lecturers so that they could use theoretical knowledge in practice.

In learners' opinion, being able to apply theoretical knowledge in practice is essential for a successful career. This aim could be achieved by participating in public seminars,

presentations, projects and practical work, as well as by receiving practical advice from professionals.

Learners also highlight the importance of methodological knowledge and programmes used in research. In this case, it is crucial that learners have knowledge on the use of statistical programmes and different research methods (Rožman, Koren, 2013).

Learners emphasise the importance of successful teamwork as tasks are then shared among group members who communicate among themselves and strive for common decisions.

This indicates that learners foresee their learning goals, which stimulate teaching staff and encourage them to work further. Knowledge is essential to a learner. Authors (Rožman, Koren, 2013) treat it as value, emphasising the importance of learning theories that reveal diverse approaches to learning. An understanding of learning facilitates an understanding of the competence of learning to learn and, as a result, enables individuals to more easily set learning goals and objectives. It is only when a learner has this understanding of the conception of learning to learn and the application of knowledge in practice that positive results and outcomes can be achieved in different programmes, courses, etc. Learner can set their own learning objectives and choose the most appropriate learning methods, thus facilitating the role of teachers.

Fink (2003) identifies six categories of significant learning:

- foundational knowledge
- application
- integration
- human dimension
- caring
- learning how to learn

As has already been mentioned, the authors (Wojtyla, 1997, Kėvalas, 2007, Buford, 2006) emphasise the importance of self-possession, self-government, self-determination, transcendence, integration and participation, which define a learner's act in the process of learning to learn.

A more comprehensive generalisation of the works of researchers who have studied adult learning to learn is provided. Learning to learn is important and increasingly vital for people trying to deal with a rapidly changing world. Or, in the words of the specialists (Hoskins, Fredriksson, 2008), learning to learn is one of the eight 'key competences that citizens require for their personal fulfilment, social inclusion, active citizenship and employability in our knowledge-based society'.

UNIQUE, a European network of educational practitioners and researchers, initiated a project that sets out to identify educational approaches, methods and concepts which support the development of the competence of learning to learn. It is important to understand what needs to be improved in the system of education when developing this competence.

The theoretical conception of the competence of learning to learn is discussed, with the aim to share ideas and assumptions related to learning to learn. The focus lies on finding approaches, methods and conceptions that are common in the European context. This is very important because, as the review has shown, terms are understood and presented very differently across Europe (Hofmann, 2008).

The paper "Learning to Learn as a Key Competence and Setting Learning Goals" (Rožman, Koren, 2013) deals with learning to learn as a key competence and the importance of the student's goal setting. Before understanding this competence, according to authors, it is important to understand learning. Learning as a process is determined by both the individual and social factors. If we want to understand the connection between the competence of learning to learn and setting learning goals, we have to understand self-regulation learning, as this is a way of learning that enables one to develop the competence of learning to learn. Individuals have different interpretations of learning theories. In this paper the authors deal with students' perspectives of how they are setting their own learning outcomes or goals. They focused on researching what students' learning goals and desired learning achievements or outcomes are. Learners were also asked about priority goals or academic standards which they want to achieve and what methods they and their teachers should use to achieve these goals.

The results imply that students are very aware of the importance of setting their own learning goals.

Learners highlighted desired learning achievements or learning goals which are a broader view on knowledge, the ability to acquire knowledge, the ability to transfer knowledge, the ability to transfer theory into practice, a good knowledge of methodology and the ability to work in teams and communication.

The research (Delahaye, Ehrich, 2008) reported in this study concerns older adults from Australia who voluntarily chose to learn the craft of woodturning. The paper examines the literature of adult learning according to the themes of presage factors, the learning environment, instructional methods, and techniques.

The paper then reports on the analysis of two sections of a questionnaire completed by 123 respondents: the first on the motivation to learn and the second on learning strategies. The older learners reported using both intrinsic and extrinsic motivation, with intrinsic motivation constructed of both general and specific elements. There were four main learning strategies

used: actively seeking knowledge, independent learning, dependent learning, and passively seeking knowledge.

The authors (Krupp, Nesbit, Takemoto et al., 1991) review practical aspects of learning to learn, focusing on how learning to learn is related to adult education. They discuss adult learning methods, labour education, distance learning, self-esteem and motivation.

Other authors (Smith, Lovatt, Turner, 2009) review research conducted on the island of Kauai, Hawaii. In this research, children from poor families were observed up to the age of 30. This research has revealed that, irrespectively of their social background and environment, these children managed to achieve their aims in life; however, everything is influenced by many factors. The authors emphasise the importance of flexibility, as well as physical and mental balance in learning to learn. Their research has also highlighted the following dimensions in the process of learning to learn: developing relations; being responsible; developing key skills; solving problems; finding information; social skills; involvement; interest; inspiration; and pursuit of one‘s aim.

Another article (Jackson, 2009) discusses adult learning theories through the perspective of adult learners in the U.S.A. The author compares the behaviourist learning theory to the famous Pavlov dog experiment where the environment helps shape the learning processes of the individual.

The humanist theory of learning claims that an individual has the potential to grow and has the desire to grow while the cognitive theory of learning believes that the learner finds meaning in what is being taught and applies this information to examine previous experiences.

Social cognitive theory, on the other hand, believes that one can learn by observing others, while constructivist theory believes that an individual can learn by making meaning of the learning environment.

The review of earlier research has revealed trends that define the importance of learning to learn, its relevance to those who aim to adapt to the changing world. Learning to learn is related to the use of different learning strategies. Besides, active pursuit of knowledge, independent learning, dependent learning and passive pursuit of knowledge among adult learners are reviewed. Adult learning literature resources are analysed, focusing on the importance of the learning environment, instruction methods and techniques.

### 1.4.1. Reflective Experience of Adults: the Scenarios of Learning to Learn

When reviewing adult learning to learn and their experience in this process, it is important to draw attention to reflective learning experience, focusing on reflection in this process. Learning

to learn involves the following constituent parts: learners or process participants with their own goals, learning environment and learning experience (Dochy, Gijbels, Segers, Bossche, 2011). The authors propose a model where attention is drawn to reflection, and the learner's individual experience. In Boud and Walker's (1990) scheme of reflection, reflection itself is defined as the base of a learner's individual experience. In other words, experiences help to shape a learner, to develop a personality that then participates in the process of learning in certain environments.

Table 1 presents the ideas of different authors and provides a review of research that has studied the importance of reflection in the context of adult lifelong learning.

*Table 1. Reflective adult learning (created by the author of this dissertation, using the findings of the authors given in the table )*

| Title | Author | Place | Year | Topic |
|---|---|---|---|---|
| Embracing Reflective Practice | Samantha Davies | UK, Locum General Practitioner, Wiltshire PCT | 2012 | It discusses the "Reflect" model that is a memorable mnemonic. **Reflective practice** enables individuals to review and improve their own practice. It can be defined as a method (consistency, order) that helps people to become self-directed learners. Participation in reflective practice enables using tools that help to identify advantages and disadvantages, special learning needs, maintain professional competence, and continue lifelong learning. |
| Reframing the Concept of Reflection: Consciousness, Experiential Learning, and Reflective Learning Practices | Richard Jordi | University of Cape Town, South Africa | 2011 | In adult learning theories, reflection is usually a rational analytical process, used to retrieve knowledge from experience. |
| „It sort of feels uncomfortable": problematising the assessment of reflective practice | Jonathan Tummons | School of Social Sciences and Law, Teesside University, UK | 2011 | The author reviews reflective practice assessment aspects. The importance of constructive learner-tutor communication is emphasised; aspects of validity of learners' assessment are discussed. |
| John Dewey's Reception in „Shönian" Reflective Practice | Harvey Shapiro | Northeastern University | 2010 | This is a modern discourse, reviewing Dewey's theory of experience, habit and possibility of broader integrated professional development. The author analyses the perception of Shön's reflective practice and compares it to Dewey's ideas. Such discussions prompt more comprehensive understanding of learners and their practices. |
| A longitudinal study exploring perspectives of participants regarding reflective practice during their transition from higher education to professional practice | Divya Jindal-Snape; Elizabeth A. Holmes | University of Dundee, Nethergate, Scotland | 2009 | The authors analyse reflective practice experiences of a group of participants during their transition from higher education to professional practice. |

The learner's experience is an essential factor in learning. However, it should be noted that the individual's reaction to his/her own experience can vary, sometimes even to the extent that it does not stimulate learning.

Non-learning can be observed in daily life situations that are permanent and stable, when individuals know how to behave from their previous experience without even thinking about it or learning from them. Sometimes people refuse to get involved in potential new learning situations simply because of lack of time or fear of possible consequences. Unwillingness to learn can also be related to a conscious reluctance to change or to individuals' desire to preserve previously acquired knowledge and values (Jarvis, 2012).

Non-reflective learning involves preconscious skill learning and memorisation. Preconscious learning involves incidental/accidental learning that one is not aware of, occurring at the edge of consciousness and not necessarily related to the direct experience gained through acting.

Skill learning is traditionally restricted to practical learning or acquiring particular practical skills. Certain skills can be acquired through imitation and role modelling, once verbal communication is restricted and attention is drawn to short and simple procedures. However, it does not necessarily indicate that a person who acquires such skills will be able to lead the process of work. Conscious and comprehensive completion of a task is only possible after formulating relations of cause and consequence in general.

Memorisation is probably the most commonly accepted form of learning for pupils and, sometimes, even students. However, memorisation is a reproductive process and does not help to answer questions or to create or change situations. This type of learning focuses on adapting and reproducing things that are already known.

Reflective learning, on the other hand, is characterised by contemplation, reflective skills learning and experimental learning. Contemplation involves searching for causal relations, thinking over events of life and formulating conclusions. Reflective skills learning involves not only learning certain actions but also understanding the essence of given tasks, combining theory and practice, understanding why a certain action should be performed in a certain way. Experimental learning involves trying out theory in practice. The outcome of this type of learning is new knowledge. It is manifested through learners revealing practical knowledge applicable in life. It would seem that the value of experience gained through words, work, activity and reflection and experience that releases personality and ensures creative learning is valuable, unquestionable and globally acknowledged. However, learning to think through and solve problems when improving one's learning is not easy as it requires determination and abilities.

Reflective practice involves individuals into a cyclic process. Learning or problem-based research starts when an individual is faced with unknown situations, such as unpredictable, unexpected or stressful events in which a learner cannot solve problems in traditional ways. The feeling of uncertainty or stress prompts a practice participant to step back and explore this

experience. The following questions are raised: “what is the nature of a problem?”; “what were my goals and intentions”; “what was I doing?”; “what happened?” The problem becomes more transparent and clear once it is observed and analysed (Savin-Baden, 2000).

A problem is a mismatch between what happens and what was expected to happen, between intention and act or between act and outcome. This is what encourages a learner to explore the field of practice, to strive for a better and more comprehensive understanding of events, to look for ideas that facilitate activity and motivation to move forward. “Problem solving is an intellectual challenge that an individual is faced with once they are unsure how to explain a certain phenomenon, fact or process, or when they cannot achieve their aim in a traditional way” (Suaugusiųjų mokymasis, 2004, p. 91).

Discussions on the competence of learning to learn emphasise learning based on values (Hoskins, Crick, 2010). In this process, attention is drawn to both social skills and learning to learn skills that are essential for both individual and social success, emphasise the importance of the educational system and the development of lifelong learning possibilities. It should be noted that social skills and the competence of learning to learn are required both when performing real tasks following set requirements, learning to learn in the knowledge society and participating as citizens in the democratic European context.

Each competence involves not only the element of cognition but also a strong emotional aspect; thus it should be treated as part of the quality of a personality as a whole. Critical thinking, creativity, equality and justice are identified by researchers Hoskin and Crick (2010) as key dimensions. In each case the nature of activity is important, i.e. social skills determine active citizenship and learning abilities when aiming at active lifelong learning. The most successful way to achieve this is by focusing on learner-oriented pedagogical methods and creating a social environment ruled by trust and respect. Academic success correlates in both citizenship and learning to learn competences (Hoskins, Crick, 2008).

The question of how adults learn has been widely discussed. Researchers tend to move away from Beckett and Hagar’s (2002) “classroom” model in education that focuses on formal academic learning towards involving and practical process of learning. Hodge et al. (2011) analysed research on adults who participated in practice-based learning which helped to identify learning as a multidimensional process. One of the authors’ tasks was to analyse how learners learn in practice-based learning. The research highlighted experience as a value and as a key resource of learning. Constructivist structure of the process of learning was emphasised by Hodge et al. (2011) when analysing the question on how individuals learn.

Learning is a constructive process. Educational psychologists (Van Der Linden, Duffy, 2000) analyse and similarly generalise this constructive approach. Learners not only receive

information but also reorganise and redesign previously acquired knowledge themselves. Constructivism highlights the processes of learners' interaction with their environment. The learning to learn competence is defined in literary resources as the strategical and flexible use of learning that corresponds to set goals, is based on recognition of (adult) learning and on the acquisition of learning itself (by relating new information to the scheme that is already stored in one's mind and using it for the development of a new scheme) (Competence-based learning, 2008).

To summarise, learning is a complex process which takes place in a certain changing social and cultural environment and is individual to every learner but, at the same time, structured to maintain balance between theory and practice. "Learning to learn involves entering into the deep meaning structures of the material to be learnt and, in its most advanced forms, may lead to critical awareness of assumptions, rules, conventions, and social expectations that influence how people perceive knowledge and how they think, feel and act when learning" (Candy, 1990, p. 31).

Dynamic relations have been noted among learning systems, adult role identities and the competence of learning to learn. Adult learning is never static or objective; it is influenced by the learner's lifestyle and interactions among learning systems and practice communities (Kasworm, 2010**).**

Learning systems are not simply structures and processes; they specifically influence definitions of key competences, as well as the learning environment which supports the development of key skills and knowledge. In this context, learning systems are identified as community practice that develops specific learning contexts, influencing adult learners' participation in effective learning and demonstration of further knowledge as an outcome (Wenger, 1998).

After reviewing the experience of three Australian universities, the authors (Hodge, Wright, Barraket, Scott, Medville, Richardson, 2011) claim that practice-based learning and learning exchanges enable learners (students) to get important and highly-valued experience. Educational scenarios allow learners to understand the principle of learning in several interrelated ways.

Adults learn in place (i.e. in practice) and through place (i.e. through practice). Various practical situations (during problem-based learning) allow learners to reflect on their approach and identity. This process is most easily noticed in an intercultural context but can also be seen through learners' involvement in various institutional and socio-economic environments.

Features of practical learning are manifested through learners', researchers' and practice staff's experiences. Attention is drawn to the specific experience of "storytelling" and "direct

involvement", as presented by Lave and Wenger (1991) and Kolb (1984). The authors emphasise educational scenarios both at university and in a practice place. "Learning – whether emanating from the university or the workplace – entails a myriad of characteristics, processes and functions that defy categorisation." (Hodge et al., p.181, 2011).

Research has also revealed that over-reliance either on university or practice place leads to either theoretical distortion or to unwanted practices (Sfards, 1998; Hodge et al., 2011). Thus research conducted in three Austrian universities revealed various learning experiences, emphasising the importance of practice-based learning.

Kasworm (2010) believes that creative and innovative learning requires compatibility which involves the development of a stable learning environment that supports learners focusing on their role and, as a result, maintaining a viable learning system that influences developing the competence of learning to learn (Kasworm, 2010).

Pukevičiūtė (2009) analysed the state of first-year students' learning to learn related to language learning and identified constituent parts of the competence of learning to learn. According to the author, the competence of learning to learn consists of understanding the importance of learning to learn; setting learning goals; anticipating strategies for achieving learning goals; choosing learning technologies (organising learning); using learning assessment that reveals positive and negative learning-related feelings and emotions; and learning meta-analysis. The authors analysed links among different learning to learn components and concluded that "statistically significant correlations among respondents' approaches to competences of planning, assessing and analysing learning were identified." (Pukevičiūtė, 2009, p.45)

Other researchers focused on adult learners: "Empirical research data have revealed that adults identify their personal ability to learn as a cognitive competence. This trend highlighted the necessity for the following meta-learning features to be analysed in adult community: perception of the importance and meaning of learning, positive approach towards learning formation, ability to self-motivate oneself to learn, increasing confidence of own success, reflection and using its results in future activities" (Lukošūnienė, Barkauskienė, 2013, p.46).

Learning to learn is a precise indicator of learners' self-assessment. Learners who participate in the process of learning to learn more successfully get more involved in this process, achieve better academic results and construct better self-assessments. According to the research "Assessment of Learning-to-learn Processes in Students" (Sadzaglishvili, Tsereteli, Berdzenishvili, 2008) learning to learn components and academic achievements are interrelated and affect each other. In these scholars' view, learning to learn components of

learners with better learning outcomes change significantly, i.e. self-confidence, and academic and social self-images are improved.

### 1.4.2. Construct of Manifestation of Reflective Experience of Adult Learning to Learn

The competence of learning to learn is a complex combination of knowledge, skills, values, approaches and dispositions, facilitating the process of both formal and non-formal lifelong learning.

The following definition of the conception of lifelong learning is provided in the European Commission recommendations: learning to learn is an ability to learn and organise one's learning, including learning through effective time and information management both individually and in groups (Key Competences for Lifelong Learning. European Reference Framework, 2007).

The analysis of research on the competence of learning to learn has revealed that this holistic concept covers values, approach, dispositions, knowledge, and skills, as well as the conception of self-perception and the individual learner's characteristics. Discussions on learning to learn highlight the learner's past, motivation and relations in this context. Learning to learn leads to "purposeful learning" (Black et al., 2006). Discussions on learning to learn should not exclude either learners themselves or their self-awareness and responsibility.

Thus these definitions of learning to learn identify key abilities linked to this competence.

Learning to learn is a process involves the reflective analysis of educational situations, having the aim to better comprehend oneself. Thus learning to learn helps an individual to recognise his/her own strengths and weaknesses and then choose appropriate learning strategies accordingly. An important role is played by the learner's motivation to learn and self-confidence in what is being done, relating everything to previous experience. Learning to learn obliges learners to use their learning and life experience and apply their knowledge and skills in diverse work, home and education-related situations (Key Competences for Lifelong Learning. European Reference Framework, 2007).

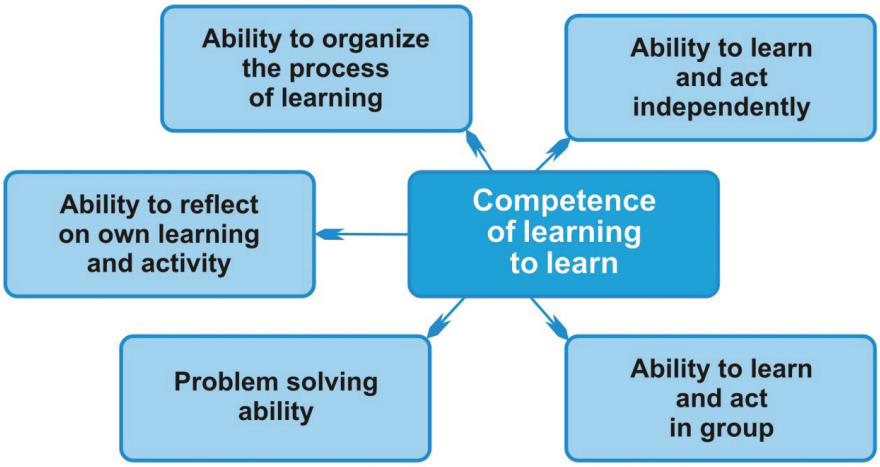



*Fig. 2. Learning to learn abilities (by the author)*

Learning to learn focuses on understanding the process and needs of learning and identifying abilities to overcome learning-related challenges and problems.

This ability involves acquiring, processing and mastering new knowledge and skills, as well as looking for and using help when solving learning-related problems.

If an individual uses learning to achieve specific work and career goals, he/she has to be aware of what abilities, knowledge, skills and qualification are required to achieve each goal.

When learning, people should always have knowledge about selected learning strategies, strengths and weaknesses of their own skills and qualifications, as well as to be able to look for educational possibilities and advice and/or support that might be available to them. Thus the individual's ability to learn and act independently is very important in the process of learning to learn.

An individual's ability to learn should not be separated from the process of learning itself, focusing on "learning practice", inclusion and interpersonal communication processes. Bereiter and Scardamalia (1989) claim that conscious learning requires practice in having learners take responsibility for their own individual and group learning. Thus students should be motivated to learn, have knowledge about themselves and others as learners, and be able to regulate their own learning. Therefore, being able to learn and work in a group is one of the key abilities of the competence of learning to learn.

Hautamäki et al. (2002) also highlights the importance of learners' personality and self-regulation.

Summarising scientific discussions on the competence of learning to learn, the following key abilities of the competence are identified: ability to organise one's own process of learning; ability to learn and act independently; ability to learn and act in a group; problem solving ability; ability to reflect on own learning and activity.

#### 1.4.2.1. Ability to Plan and Organise the Process of Learning and Activity

Individuals pursuing active and meaningful activity learn throughout their entire life. In a rapidly changing world, attention has to be drawn to learners' ability to plan their own process of learning and their activity. It is important for learners to set priorities and plan their time as well as create an appropriate work environment. They should be able to identify their learning needs, goals and resources, as well as choose the best strategy for learning (Lipinskienė, 2002). Learners are also experts for themselves and have to answer the question of what way of learning suits them best.

A learner creates certain situations which help to organise the process of learning. Meetings with other participants in the process and their collaboration enable learners to adapt to certain environments and conditions. Discussions on organising the activity of learners and instructors identified the following pedagogical situations: information transfer, self-management, joint activity, counselling and expertise (Bižys, Linkaitytė, Valiuškevičiūtė, 1996).

Each situation, i.e. information transfer, self-management, joint activity, support and expertise, involves different activity scenarios. In information transfer, a teacher is the active participant. In this situation, an informative relationship is established between a learner and a teacher. Thus, the learner cannot actively apply different learning methods but has to receive a sufficient amount of information and then move on in the scenario of supervision. In this situation, a learner and a teacher establish a team relationship. This scenario prepares individuals for active learning while mastering different ways of learning. The third situation involves joint activity and focuses on cooperative relationship between a teacher and a learner. The scenario of this situation differs from the above scenarios as the learner now has to set goals and formulate tasks. Besides, a learner and a teacher act alongside in joint activities.

Support is the fourth situation described by the authors. This situation is characterised by consultative relationship. Learners organise individual or group work following their learning goals (Bižys, Linkaitytė, Valiuškevičiūtė, 1996). At this stage, the learner is active, has new ideas and is willing to implement them.

The fifth situation focuses on expertise where learners gets to know themselves better by participating independently in learning activity. An expert relationship prevails between the learner and the teacher, i.e. the teacher acts as an observer of the process. If desired by the learner, evaluation of the learner's activity can be carried out.


*Fig. 3. Dimensions of the ability to plan and organise learning process and activity (by the author)*

Different pedagogical situations between a mentor and a learner have been revealed: information transfer, joint activity, supporting and assessment – expertise. Analysis of the research data of Staniulevičienė (2008) helps to identify different pedagogical situations demonstrating relations between the mentor and the learner during practice and reflecting the process of teaching – learning. Mentor-learner relations during the process of teaching-learning in practice change from direct to indirect.

### 1.4.2.2. Ability to Reflect on Own Learning and Activity

When faced with challenges, tasks and problems in the process of learning, learners use a particular type of thinking. For example, while making decisions, learners prioritise different aspects and use different types of thinking to draw conclusions. Transformative learning is beneficial and facilitates the process of learning when applied in particular situations, e.g. when questions arise. Transformative learning is demonstrated when a person asks a question and looks for a way of understanding the answer. "Thus transformative learning consists of three stages: critical reflection on own understanding and its assumptions; testing new insights in discourse; and activity" (Zuzevičiūtė, Tersevičienė, 2008, p. 79).

Mezirow's term frame of reference is defined as the structure of our assumptions and expectations through which sense impressions are filtered. Meaning-forming is an activity through which we shape a coherent meaning out of the raw material of our outer and inner experience.

Discussions on learning to learn also focus on a process of transformation that consists of several stages that learners go through and, as a result, become more conscious. This is a process where individuals acquire a better and more comprehensive understanding of reality (especially social) and realise that they are able to act and change this reality (Zuzevičiūtė, Tersevičienė, 2008, p. 79).

It is also necessary to emphasise the importance of reflection in these processes: "individuals develop through communication, work, activity and reflection rather than silence" (Freire, 2000, Zuzevičiūtė, Tersevičienė, 2008, p. 79).

The importance of the learner's individuality and situations that the learner is faced with should not be left out of this consideration. The successful learner's reflection can be discussed by highlighting closely related individual characteristics and learning situations.

Researchers of the phenomenon of student teaching and learning at higher education institutions emphasise the importance of independent learning (or self-directed learning) and reflective learning (Baranauskienė, 2002, Bjerknes et al., 2002, Jovaiša, 1998, Jucevičienė, 1997). According to Laužackas (2005), reflection is a process where professional experience is converted into learning, learning is converted into professional and personal development and, eventually, this development is converted into higher quality professional activity. New knowledge and skills are the outcome of reflection.

After analysing different authors' ideas on the meaning of "reflection" (lot. reflexio), Bubnys (2012) provides a definition of this concept. It is an active cognitive process, involving sequences of interrelated ideas, focusing on the importance of knowledge and beliefs (Shon, 1987). "Semantic meaning of the word reflects the process of contemplation and analysis, exploring correlation of the process, means and context" (Raines, Shadiow, 1995). Intellectual activity helps individuals to become aware of an analysed phenomenon or event, to evaluate what it means to them, what they experience… It is an active process of creating and revising information and developing new theories. (Loughran, 1996; Jarvis, 1999).

Reflection allows individuals to understand and acknowledge the differences and peculiarities of another individual's thoughts and, at the same time, to be able to originally identify and present the essence and meaning of the analysed phenomena. (Kraujutaitytė, 2002, p. 11).

It is a fundamental ability for an individual to consciously control activity, make decisions, plan and manage cognitive processes, i.e. memory and thinking (Kepalaitė, 2005).

Furthermore, it is a general term to describe intellectual and affective activities in which learners are involved to explore their experiences and develop new understanding and approaches (Boud et al., 2005).

Reflecting is not only an intellectual practice and a kind of thinking but also a process where emotions are involved.

Learning focuses on not only the mechanical development of skills but also on values and knowledge, narrowing the gap between theory and practice (Baranauskienė, 2000). “Reflective learning is associated with lifelong learning and is one of key preconditions for the development of learning to learn, enabling complete realisation of own experience, as well as distancing oneself from daily events and traditional reality.” (Bubnys, 2012, p. 14). Reflective practice is perceived as increasingly important evidence of continuous professional development, involving the processes of assessment and validation. Reflective learning is transformative (Bubnys, Žydžiūnaitė, 2012, p.9).

Essentially, reflective practice involves internal research and the analysis of a problem or situation, evaluating what has been learnt from experience and how this will influence future experiences and practice (Roffey-Barentsen, Malthouse, 2013; Davies, 2012).

To summarize the ideas of researchers, the ability to reflect on one’s own learning and activity in the context of adult learning to learn during their entire life period is important because of a person's inner potential capacity to connect theory and practice, not only performing actions in ordinary situations but also giving meaning to their activities, their use of already existing experience, and then reflecting on it again and adapting it in everyday situations.

#### 1.4.2.3. Problem Solving Ability

Problem-based learning is learner and learning-oriented and focuses on active interaction between a teacher and a learner (Suaugusiųjų mokymasis, 2004). Figure 4 illustrates stages of this cyclic process.

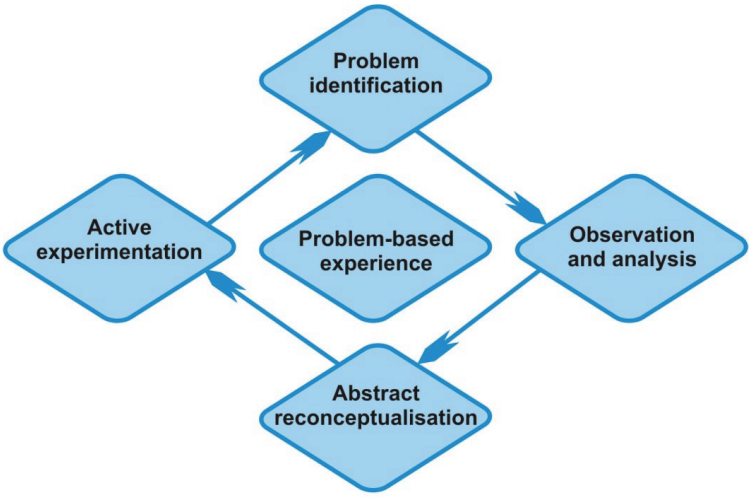



*Fig. 4. Reflective practice: experiential learning cycle (Osterman, Kottkamp, 2004).*

In practice, individuals face problems every day. Practice-related problems and personal issues encourage and motivate learners to get involved in the process of learning. Problem identification during practice is not an easy process and requires discussions between a learner and a practice supervisor. Such discussions allow identifying possible solutions to problems and issues that once seemed impossible to deal with. (Gedvilienė, Staniulevičienė, 2011).

Problems also arise in practice places due to a learner's inexperience. Timely help from a practice supervisor is highly important to a learner. Sometimes problems are caused by learners themselves and their unwillingness to get involved in the process of learning.

All learners are different. Some are very enthusiastic while others feel indifferent and pessimistic. Sometimes students do not understand that certain problems disturbing their process of learning lie in themselves. If a learner cannot find a way out of a complex situation, he/she creates "a defensive mechanism" and tries to ignore the problem. When observing the situation at a practice place, a supervisor notices a mismatch between what he/she would like a student to be do and the student's perception of the situation. As a result, the microclimate in the practice place can be really poor, i.e. both a student and a practice supervisor feel dissatisfied. Reflecting is beneficial in such situations.

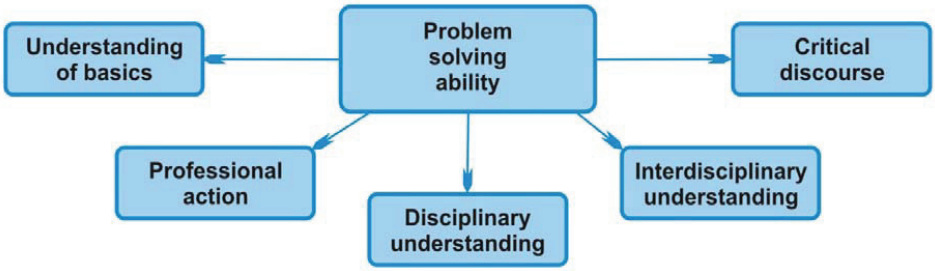



*Fig. 5. Dimensions of problem solving ability*

Problems in practice place can be either systemic or incidental (Savin-Baden, 2000). Some problems can be clearly seen and defined while others are hidden and need specific insights. They differ both in their form and extent. Some problems involve just a small group of people while others are deeper and involve the entire personnel of an organisation.

The problems may occur in different situations so that various dilemmas lead to problem identification. An important role at this stage is performed by participating people who help a learner to draw the attention to the situation in a practice place, as well as to personal problems disturbing the process of learning to learn.

This is why an important part of this reflective practice cycle is the stage of observation and analysis. At this stage, information about the practice participants' experience is collected and critically assessed. This information helps to construct a fuller idea of certain situations. It is important for a learner to collect as much information about the situation in a practice place as possible. Metaphorically, a learner is transformed into a theatre critic who watches and analyses his/her own action on stage; the learner is turned into both a subject and an object.

Actions and events have to be looked at from a new perspective. A reflecting practitioner has to develop his/her own observation skills. Close observation is the basis for further stages of reflective practice, i.e. analysis, decision making and experimentation. Observation helps to reveal the complexity of a situation in a practice place. The way a situation is interpreted determines actions to be taken in a practice place. Every decision involves several steps. Each learner starts learning in practice having his/her own understanding. During practice the learner faces, observes and interprets constant changes, as well as makes conclusions on what, how and why something happened. These conclusions then determine the learner's decisions and new actions. Learning during practice is perceived as moving forwards, i.e. the learner observes, gives meaning and makes decisions. Later, when experience is gained, the learner acts considerably faster. Sometimes situations repeat and learners then are able to use their previous experience and, as a result, make conclusions and decisions faster.

Learners' experience and likings also differ. Thus differences are noted in the aspects and details that they take into consideration in their practice place.

Students collect data on the situation, problems etc. by observing situation in their practice place.

**Abstract reconceptualization**

At this stage, a learner searches for new information and ideas on how to solve a problem. Reflecting helps to find ways to solve problems and identify new directions of activities. A learner's personal reflection determines new activity paths. Thus relations between the learner and practice supervisor are very important at this stage. Reflective listening is beneficial to the learner. After getting feedback from a practice supervisor, the learner can find out if everything was done correctly and whether the most appropriate decision was made. Expert opinion helps the learner in the process of learning; however, attention should also be drawn to theoretical knowledge received during theoretical courses.

**Active experimentation**

This is yet another new stage in which learners can already distinguish between their double role. After gaining experience in previous stages, learners are already able to collect information knowing what to draw attention to and being much more self-confident. The sequence of events is analysed, while the hypothesis is either accepted or rejected. The process of learning continues and other questions are raised.

Then the learner goes through all the stages of learning looking for an answer to a new problem-based issue. The four stages guide learners through the process of reflective practice. Experienced professionals often act automatically, without following the sequence of stages. These stages are important to a learner who has just started learning in practice as they facilitate the search for the most appropriate and effective methods of activity.

According to Shelton (1999), the use of reflection is one of the most efficient ways to improve reflective practice. He notes that reflection is a process where professional experience is turned into learning, learning is converted into professional and personal development and, eventually, this development is turned into higher quality professional activity. Thus new skills, knowledge, understanding, meaning and perception are all the outcome of reflection. By integrating new acquisition into existing understanding, skills and approaches, it becomes possible to turn acquisition into higher quality professional activity. In r*eflective learning,* an individual is able to think though one's experience and, as a result, to anticipate new possibilities, new ways to act and new outcomes. Problem solving, observation and assessment are used. However, reflection abilities are very important in studies as with the increasing number of possible choices (consumer society, advertising), one has to make decisions by

thoroughly thinking them through, reviewing, testing and changing one's beliefs and attitudes. Thus the importance of experiential reflective learning has always been evident when integrating both learning into life and life into learning.

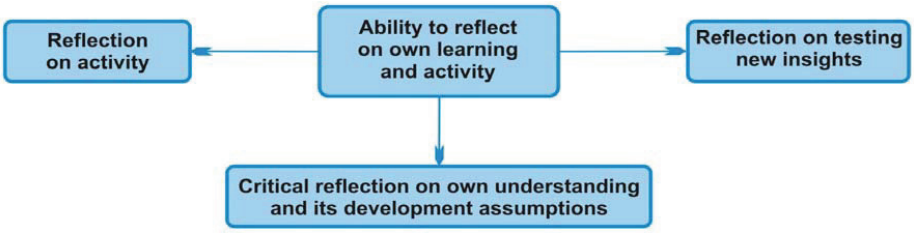



*Fig. 6. Dimensions of the ability to reflect on own learning and activity*

To sum up researchers' ideas, in learning to learn attention is drawn to conscious controlling of learner's own activity, decision making, planning, experimentation, and cognitive process management (memory, thoughts). All these processes require learners' ability to reflect on their own learning and activity.

#### 1.4.2.4. Ability to Learn and Act Independently

Independent learning (or self-directed learning) is defined as a process where learners take the initiative to plan, implement and evaluate their own learning needs and outcomes either with or without others' help (Knowles, 1975). One of key independent learning features is the necessity for learners to take some responsibility for their own learning rather than simply follow given instructions (Boud, 1981). Independent learning supplements traditional learning methods and provides learners with more possibilities to achieve their own potential (Boyer, Edmondson & Artis, 2011). Thus by joining independent learning and traditional learning (e.g. lectures), instructors will be able to interest learners and get them involved.

Conducted research has shown that independent learning is related to five learning constructs. These constructs are: academic performance, future aspirations (ambitions, desires), creativity, curiosity and life satisfaction (Edmondson, Boyer, Artis, 2012). Research results have shown that independent learning is significantly and positively related to each of these constructs. The authors conclude that independent learning projects benefit not only academic performance but also the learners' future and their life satisfaction (Boyer, Edmondson &Artis, 2011, Schedlitzki, Witney, 2013).

Creativity is a major dimension of original thinking. Unique ways of thinking used in problem solving allow learners to go deeper into both traditional learning and independent thinking. Creative experiences and achievements are related to the learners being ready to learn independently (Torrance, Mourad, 1978). Their creativity helps learners to develop their intuition when solving problems, which is a prerequisite for their ability to get involved in independent learning (Kreberm, 1998). More creative learners can use independent learning more effectively. Thus researchers' ideas validate the fact that independent learning ability is certainly related to creativity.

Curiosity is also associated with the pursuit of information and knowledge (Berlyne, 1960), as it encourages learners to explore and research (Reio, 2004). When learners lack knowledge, they search for information in their environment in order to fill in these gaps. Independent learning is one of strategies used to find answers to questions that learners are faced with in the process of learning and learning to learn.

Life satisfaction is defined as a global assessment of the individual's life quality under individually chosen criteria. Researchers' evaluation indicates that psychosocial welfare can be associated with participation in continuous learning which involves independent learning activities. The research carried out by Edmondson, Boyer, and Artis (2012; 2011) has also revealed positive relations between life satisfaction and independent learning. Therefore, it is likely that those individuals who are satisfied with their life will also demonstrate more comprehensive independent learning skills.

Future aspirations are based on the model ofthe individual's behaviour, indicating the extent to which the level of individual achievements and academic performance corresponds to an understanding of the individuals' scientific capabilities or possibilities based on their past and current achievements Edmondson, Boyer, Artis (2012). Those learners who experience more stress and anxiety are faced with difficulties when trying to define their future aspirations too accurately and are either over-ambitious or under-ambitious. In addition, future aspirations are related to the learners' knowledge of their career field. Their understanding of their career path helps them to direct their own learning, stay motivated and gain more learning experience. Thus learners with clearly defined future aspirations are more motivated to direct their own learning so that self-directed learning is positively and significantly related to aspirations. The results given in the article "Self-directed learning: a meta-analytic review of adult learning constructs" (Edmondson, Boyer, Artis, 2011, 2012).


*Fig. 7. Dimensions of the ability to learn and act independently*

According the scientific information mentioned above, in Figure 7 the author of the dissertation gives a graphic image of the dimension of the ability to learn and act independently.

### 1.4.2.5. Ability to Learn through Collaboration

The following key aspects of learning in groups are identified by the authors: knowledge is gained together; learners are active creators; learning is based on cooperation; shared responsibility; mutual support; learning of social abilities required for successful cooperation;the instructor (mentor) observes, advises and, if necessary, intervenes; the group assesses its own efficiency and performance (Johnson et al., 1991; Teresevičienė, Gedvilienė, 2003). Discussions on group learning define it as a "social process" that affects each learner's attitudes and, at the same time, the entire group (Teresevičienė, Gedvilienė, 2003).

Five key aspects of the process of group learning are social, communicational, organisational, personal and economic (Roffey-Barensten, Malthouse, 2013). Social aspect involves the professional practice place and relations with people in and outside of an organisation. Communicational aspect refers to individuals' ability to communicate with others, apply different writing styles in tasks, express thoughts, ideas and emotions, talk to different groups, exchange ideas, use electronic communication, prepare reports, provide material to individuals and groups and, most importantly, listen to others. Organisational aspect emphasises links between the learner's thinking and the characteristics and structure of an organisation, content and consultations. The organisational philosophy should also be taken into consideration. Personal considerations refer to the learner's stance in the entire context of values, beliefs, feelings and behaviour. This aspect could involve thoughts on work-life balance. It also emphasises the importance of time planning, i.e. when work starts, how long it takes to get to a workplace, etc. Economic aspect analyses financial effects on professional

practice, i.e. fees, expenses, payments, pension fund contributions, etc. Economic considerations are significant in the process of learning to learn, since the learners' participation and involvement in the process of learning differs depending on their financial situation. The tools that are used affect the process of learning to learn as well.

It is important for learners to reflect on what they may need for successful participation in learning.


*Fig. 8. Dimensions of the ability to learn in a group*

Summarising scientific ideas in the previous sections on the adult competence of learning to learn, the following key abilities of the competence are identified: ability to organise one's own process of learning; ability to learn and act independently; ability to learn and act in a group; problem solving ability; ability to reflect on one's own learning and activity. A separate analysis of each ability focuses on identifying components that form this ability as a complex construct.

Dimensions of the ability to plan and organise the process of learning involve information transfer, supervision, joint activity, counselling and assessment – expertise. The construct of the problem solving ability consists of understanding the basics, professional action, disciplinary understanding, interdisciplinary understanding and critical discourse. It is important to note that the key dimensions of the ability to reflect on one's own learning and activity are reflection on activity, critical reflection on one's own understanding and the development of assumptions and reflections on testing new insights. Discussions of the ability to learn and act independently helped to identify the following dimensions: curiosity, academic performance, future aspirations, life satisfaction and creativity. The individual's ability to learn in a group focuses on personal, communicational, organisational, social and economic considerations.

**Significance of Adult Competence of Learning to Learn: Construct of Learning to Learn for the Adult**

The development of the European higher education area is more than a formal process and involves significant transformation of the contemporary teaching-learning model. Due to

considerable changes in the labour market, study programmes should become a tool that learners could later use to facilitate their effective participation and involvement in a contemporary knowledge society.

The concept of a "knowledge society" or "learning society" is closely related to the idea of viewing science in a wider context, e.g. lifelong learning where individuals are able to manage and renew their own knowledge, to choose what is most appropriate in each context, to learn continuously and to understand how they could apply gained knowledge in new and continuously changing situations.

In Figure 9 the construct of learning to learn for adults presents dimensions of a complex construct playing an important role in the personal, social, professional and cultural contexts of adult lifelong learning.

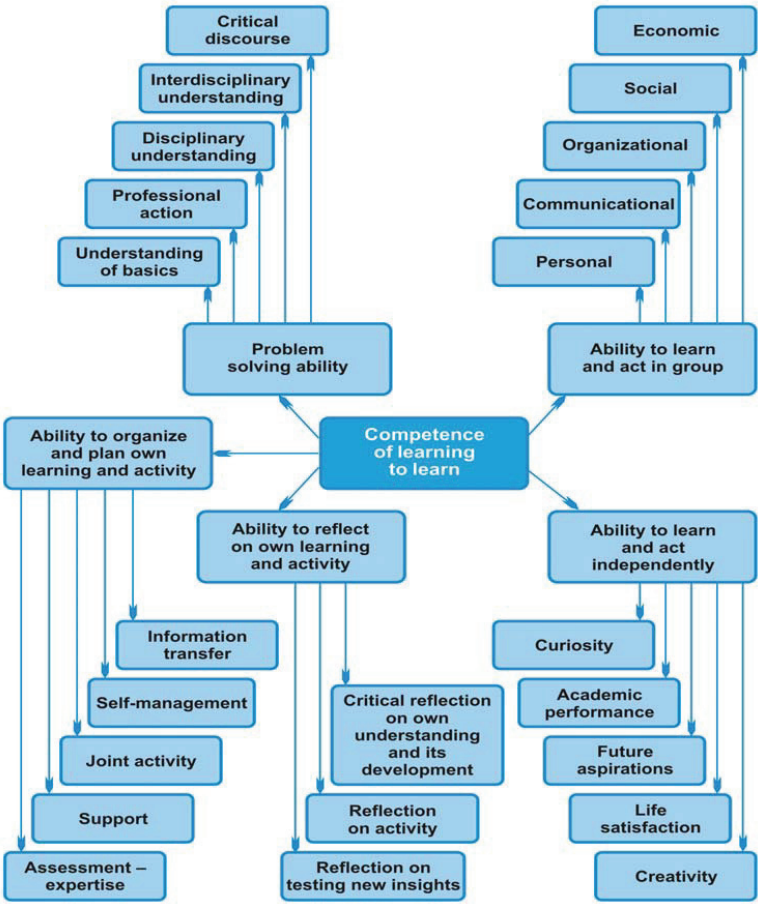



*Fig. 9. Construct of learning to learn for adults (by the author)*

Analysing the conception of learning to learn it is important to understand where learners stand and what learning methods they use. Attention should be drawn to how adults learn and develop personally, professionally and socially in their environment. It is important to take into consideration both personal learners' needs and scientific requirements that learners face during the process of learning when they meet different problems.

**Learning to Learn Scenarios of Adults**

During learning to learn, learners are inevitably faced with situations where they have to solve problems. One of key aspects of learning is the learners' active participation in the process where they aim to master knowledge through active thinking and creative solutions to cognitive and practical problems. According to Savin-Baden (2000), this model (Fig.10) is characterised by knowledge that conveys meaning. In this model, knowledge is characterised as unquestionable, while solutions to problems are clear to specialists and specific to learners. This is when problem-based learning can be used as it helps learners to understand the content. Problem-based situations are seen as ideas that help learners to learn through understanding, managing and systemising knowledge.

In practice, problem-based learning is demonstrated in different fields; a problem-based scenario is based on key conceptions that learners should have mastered. This model has a number of problem-based learning components. Besides, it is unique as problem-based learning is used to enable learners to develop problem-based learning skills so that their knowledge could be used in solving problems and testing their abilities during activities.

However, uncertainties can arise in a problem-based learning programme. Learners may face problems as some tutors expect learners to master a programme thoroughly step by step while others view this process from a more creative perspective and let learners to find answers themselves. In this case, learning itself will be a process where knowledge has to be coordinated in order to solve problems following a schedule set by a tutor. Attention is also drawn to the learner's individual experience, useful information learnt during courses and literature that has been read, as all these aspects lead to correct answers. A learner's experience is also important to other group members as a secondary source of information following course books and expert articles.

During this process learners search for answers using the knowledge which they are offered and making decisions. Content is conveyed independently from learners. Learners describe themselves as knowledge recipients who then think through the information they have received. Using problem-based thinking they improve their understanding and link theoretical knowledge with its practical use. Irrespective of their age, learners are treated as knowledge reciepients.

In many cases tutors will not respond to difficulties experienced by groups as they want learners to raise problem-based questions themselves. In this model, tutors are facilitators who lead learners towards tools and correct answers so helping them to deal with the situation.

This model relies on information reproduction pedagogy (acquisition and reproduction of information that learners receive from teachers) and strategic pedagogy (scheduling and adapting to what is expected from learners following a plan).

Learners can choose the most appropriate method for acquisition of knowledge in a course. Thus during the course learners can decide to work individually, which may be less intimidating than working in pairs when people find it harder to accept failure. People can also work individually if they are more advanced than other group members. Those individuals who aim to acquire the provided knowledge can help other group members by transferring knowledge. When working in pairs, they will assess and use previous experience, develop self-confidence and renew knowledge. That is how learners learn and progress (Savin-Baden, 2000, Teresevičienė et al., 2004, Gedvilienė, Staniulevičienė, 2012).

The second learning to learn scenario is characterised by the "know-how" conception. At this learning stage learners learn how to solve problems and how to apply these solutions to different scenarios and situations. Thus learners think critically and use the knowledge theyhave been provided in their work-related and other activities. The use of skills is highlighted at this stage.

Focus is drawn to skills in the university and later in any other activity context. It is a misconception to believe that these skills will be identical in the labour world. Transitions are expected from learners where important roles are played by both learners and tutors. Learners learn to act in particular situations. New skills can be developed through teamwork, communication, presentation and solving problems. It is important for learners to understand what the terms "professional" and "professionalism" mean. They should learn how to behave appropriately in certain situations. Therefore, a scenario like this, which is also offered, for example, by problem-based learning, focuses not on the entirety of knowledge but rather on what skills should be transferred and how the transfer of meta skills should happen. It is important to ensure that in these study programmes skills-based learning does not become teaching behaviour where practical learning is contrasted with examination tests. A possible example of such learning would be a simplified learning method used in clinical laboratories where skills are developed separately, i.e. not in the environment where abilities should be used. Such programmes focus more on the value of certain subjects rather than their depth, professional decisions and personal opinion. The dangers of the second scenario are that problem-based learning may used as a mechanism for developing a simple "complex" of skills.

Learners can also feel that things that they learn do not relate to other forms of knowledge. For example, too much focus on communication skills or team work, and insufficient attention to learners' involvement and reflection may lead to learners' unconditional agreement to a tutor's opinion and supervision. Such learning would not help learners to understand that their workplace may well require different teamwork skills to those they were taught at university. Skills and "know-how" are important; however, this scenario requires both a general understanding of skills and knowledge of how to do things. Everything is related to cognitive content and making professional decisions (Savin-Baden, 2000, Teresevičienė et al., 2004).

In the third learning to learn model, "know-how" differs from "knowledge that is offered Problem-based learning becomes a tool that links "know-how" and "know that" and connects a programme with subject knowledge. Staff at a practice place aim to help learners to understand things in an "interdisciplinary" way by facilitating acquisition of knowledge and using meta skills in the context of labour world and academic learning.

Barnett (1994) has stated that interdisciplinary learning is impossible as axioms are distorted and changed. However, this argument is more complicated than simply making a decision that interdisciplinarity is ineffective. Disciplines change and expand their boundaries with the aim to maintain staff in the labour market. Sometimes programmes are wide and complex as learners are taught to become general-profile specialists.

The profession of nursing could be taken as an example. The staff try to support interdisciplinary understanding during problem-based learning. The aim of employees is to enable learners to coordinate knowledge of different subjects and to join knowledge acquired during group learning into a single entity. Thus problem-based learning is focused on the learners' ability to understand and synthesise information rather than going into detail. Employees want learners to understand physiology and learning psychology, as well as to be able to use a computer programme. Learners should also be able to apply this knowledge in practical situations. In such cases problem-based learning is ideal for these learners' education.

This model focuses on other disciplines and their knowledge. However, students are provided with a considerable amount of knowledge only theoretically and in isolation from reality. In contrast, those learners who use a problem-based scenario to answer their own questions can remember and link their knowledge better.

In this model learners work and learn their subject and other disciplines. When learning different disciplines learners understand that these disciplines overlap and that it is important to find these links themselves. Learning is identified as knowing and understanding the discipline's knowledge, as well as their relations, which is useful both personally and pedagogically. Problem-based learning joins disciplines with versatile skills so that learners are

able to identify themselves as professionals who link disciplinary knowledge and their own personal position. Students are not only enabled to develop an epistemological approach but also relate theory to practice, i.e. join "know that" and "know-how" (Savin-Baden, 2000).

In the fourth scenario, learners recognise the boundaries between disciplines; however, these boundaries are imaginary. Participants can cross these boundaries but it is difficult to understand where a certain boundary is and where its knowledge is stored. According to Popper (1965), entire thinking (action and experience) happens in a certain framework and system. However, this system is not always restricted. It has to be emphasised that rules on what is acceptable in one discipline are often impossible to be applied to another discipline. The nature of structures differs so if one of them is distorted, another is also changed. All links among these systems change and become problem-based. In this model, boundaries between disciplines are not distorted. Knowledge and skills are presented within a subject and learners get acquainted with other disciplines without crossing their boundaries.

According to the concept of pedagogical autonomy, learners are more self-directed and learn independently. Participants make independent decisions on how they learn. Learning is decentralised, without crossing the boundaries of a discipline. Attention is drawn to reflection, self-evaluation and being open to others. Besides, a learner's present knowledge is linked to what is offered theoretically and theory is related to practice within the boundaries of a discipline.

In this problem-based learning model, learners are encouraged to select a critical approach to their knowledge, to themselves and to their group. They should use a problem-based learning group to test their personal and pedagogical boundaries. Learning under this model enables learners to improve and develop both individually in a group and as a group. Group members solve dilemmas and find meaning. A facilitator in this case acts as a conductore of possibilities.

The possible dangers of this model are that learners are left alone since facilitators believe that they do not need to interrupt group work. At some point a group might be moving towards criticism which can negatively affect both students and group processes. As a result, work quality deteriorates and a group is not provided with high-quality feedback.

In this model, students start thinking critically, learn independently and apply multidimensional methods that connect their knowledge. Students have critical perceptions of cognitive boundaries within a discipline. Overlapping boundaries do not indicate that subjects are to be joined into one entity. Students will be able to identify what is useful in problem-based learning (Savin-Baden, 2000, Teresevičienė et al., 2004).

Problem-based learning is used in many spheres, since with the increasing numbers of scientific resources in an age of modern technologies, the need has increased to help learners to manage their learning. The personnel in a workplace also emphasise their willingness to help learners to develop critical thinking that could then be used to solve multidimensional problems. This way of thinking focuses on joining "know that" and "know how", as well as on the context where a problem arises. In this model, problem-based learning is a form of learning where learners are provided with higher education knowledge through study programmes that encourage learners accept challenges, assess and reflect. Learners draw attention to multidimensional activity models, knowledge, causality, multiple reflection and the possibilities to explore and research structures and systems both among other disciplines and in their own professional field (Savin-Baden, 2000, Teresevičienė et al., 2004).

To summarise the above scenarios, the first learning to learn scenario focuses on problem-based learning as a tool that enables learners to develop their problem-based learning skills so that they could apply knowledge when solving problems and could test what they have learnt in practical activity.

In the second learning to learn scenario, learners learn how to solve problems, as well as how to learn to apply them in different problem-based scenarios and situations. In the third scenario, problem-based learning combines disciplines and versatile skills so that learners can perceive themselves as professionals who relate knowledge offered by disciplines to their personal stance and experience.

The fourth learning to learn scenario focuses on decentralised learning where the boundaries of a discipline are not crossed. Attention is drawn to reflection, self-evaluation and being open to others. Things that a learner knows are combined with theoretical aspects and ideas.

In the fifth learning to learn scenario, knowledge is conveyed to learners through programmes with multidimensional activity models, knowledge, multiple reflection and the capacity to accept challenges, assess and reflect. Learners explore and research structures and systems both among other disciplines and in their own professional field (Savin-Baden, 2000, Teresevičienė et al., 2004).

Analysis of literary resources helped to identify five key learning to learn scenarios that take into consideration the learner's personal characteristics, values, present knowledge, skills and abilities to organise the process of learning, learn and act independently, learn and act in a group, solve problems and reflect on learning and activity.

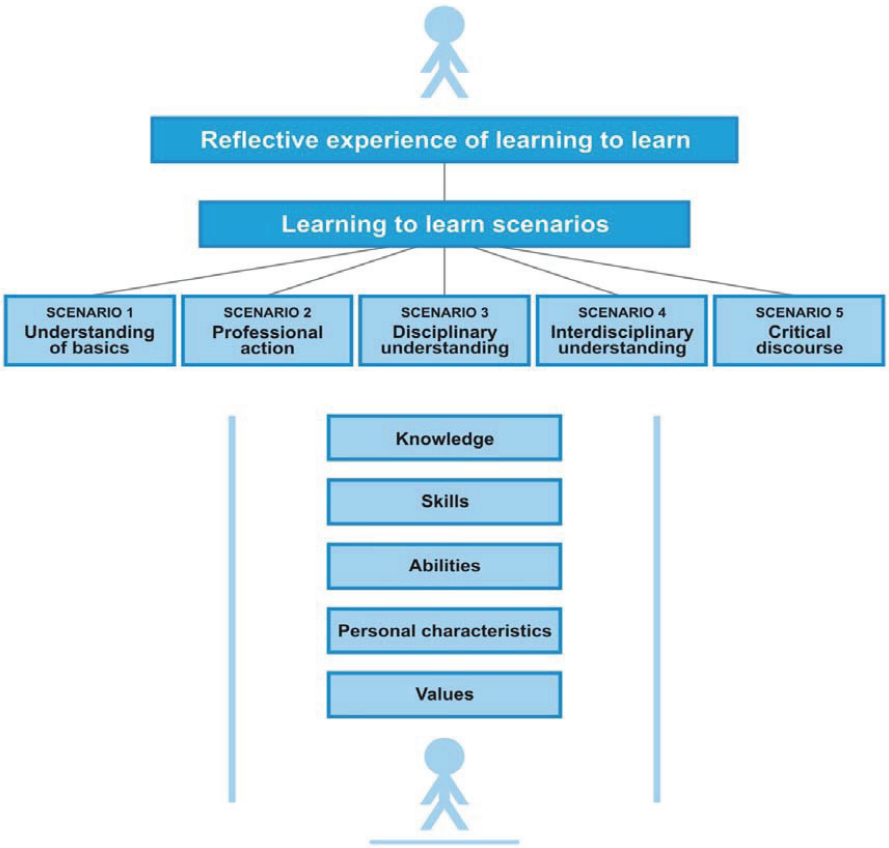



*Fig. 10. Construct of the Manifestation of Reflective Experience of Adult Learning to Learn (modified by the author)*

**Generalisation**

Equal opportunities, social cohesion and active citizenship are emphasised as priority tasks. It is important for all citizens to improve their skills and develop the competence of learning to learn which is essential when looking for work, staying in the labour market and pursuing lifelong learning that encourages active citizenship and dialogue among different cultures. Lack of education should be reduced by using high-quality involvement in the process of learning (Education and Training 2020 (ET 2020)).

Learning to learn is at the centre of this context, focusing on individuals' ability to learn actively, organise their own learning (including effective time and information management), learn and act both independently and in groups.

The construct of reflective experience of adult learning to learn is important in drawing the conclusions of this theoretical part. Learning to learn scenarios are individual for each

participant. But it should be mentioned that all scenarios are connected through such components as values, personal features, knowledge, abilities and skills.

The construct of reflective experience of adult learning to learn helps to answer the questions raised by this scientific research, focusing on the main components of adults‘ learning to learn. This construct, generalizing the theory about learning to learn, leads to the questions for the empirical part of this research, helping to discuss the reflective experience of adult learning to learn, and focusing on key components of learning to learn among different age groups.

When considering adult learning to learn, personal constructions of actions are undoubtedly significant, as these demonstrate the adults' personal goals, the tasks they raise for themselves and their personal motivation (Little, 1983), which depend on issues of time, place and social roles. Processes such as self-efficacy, belief in results and outcome expectancy are connected with specific spheres (work and family) as well as usefulness and meaningfulness (Bandura, 1997, Lachman, 2004). Work and family are those spheres that actively determine people's lives and give them a degree of meaning (Carver and Scheier, 1998).

Throughout life, identity plays a major role in the sphere of adult learning and learning to learn. Adults' plans and goals for the future are linked to their personal "I": this is one of the aspects of identity that helps in learning and also in carrying out an action. The adult person "I" is one of the main motivating tools that influences him/her. When future goals are understood as part of the adult's personal "I", the person is more inclined to pursue these tasks. It is also important to mention that goals are linked to emotions which help a person and accompany him/her in adult daily life. Adults in pursuit of what they envisage, seeing what they are and what they want to be, how they would like to learn, have the opportunity to improve, using their inner potential, as well as to change, improve or even remain as they are in the flow of life (Bolkan, Meierdierchks, Hooker, 2011; Handbook of Reasearch on Adult Learning and Development, 2011).

# 2. RESEARCH METHODOLOGY

This section presents methodological research provisions, research design and stages, the details of empirical quantitative and qualitative research methods and organization of the research.

## 2.1 Methodological research provisions

The conceptions of constructivism, social constructivism and triangulation of methods have been used to research adult learning to learn experience.

Constructivism involves many interrelated perspectives. From the constructivist perspective, learning is the process of constructing meaning: learners construct their knowledge on the basis of their experience (Merriam, Caffarella, 1999). "Constructivism is the conception of acquisition claiming that a learner constructs the concepts of events and phenomena on the basis of own experience and previously introduced models; following this conception, learning is active development and revision of information and construction of new models." (Bitinas, Rupšienė, Žydžiūnaitė, 2008, p. 124).

The theory of constructivism contends that a learner is an active participant of the process of cognition. Learners learn through actions which help them to achieve goals. They also learn to learn through experimentation. The authors highlight the significance of learning through actions (Dewey, 2000, Mažeikienė, Lenkauskaitė, 2011). To sum up, according to constructivist ideas in the adult learning to learn context, learning to learn is a process of constructing, where attention is drawn to the learner's experience.

Learning to learn is a path and process with certain scenarios. Theories from social constructivism to social realism (Young, 2008, Patzold, 2011) discuss the individuals' participation in this process; however, constructivism describes learning to learn as an individual intellectual activity and as a dialogue, exchange and social activeness. Thus in this dissertation constructivism is significant in revealing adult reflective experience (planning activity, learning independently and in a group, reflecting on aspects of learning to learn and solving problems). Knowledge acquisition and mobilisation is the outcome of the process of active constructing and thinking. From the social constructivism perspective, knowledge is accumulated when people get socially involved in a conversation or action related to their projects or problems. In this case learning can be separated neither from culturally transferred understanding nor from discussion of the world and reality (Merriam & Caffarella, 1999, p. 262).

Social constructivism highlights "the role of social processes and indicates that legislation can guarantee theoretical learning opportunities but practical level of participation and involvement depends on individuals themselves" (Kuncaitis, 2009).

Vygotsky contributed to the theory of learning by introducing the concept of the zone of proximal development. His idea is to evaluate the level of the learner's achievements and knowledge and to create a learning situation within that learner's level, avoiding situations that lead to non-productive behaviour. In this case the situation remains within the zone of proximal development at the present moment. A learner faces a situation or problem that is complex and difficult but not too difficult or complex to be dealt with. In other words, it does not disrupt the process of learning. The goal is to find the zone of development where, irrespective of their age, learners could get help and achieve what they could not have achieved on their own. Learners should stay in the context where they could mobilise their previous knowledge, contrasting it to reality and critical understanding in order to overcome imbalances created by the context.

In looking for common elements in different descriptions of constructivism that were offered, the author came to the conclusion that constructivism is an approach which presents an internal learning mechanism for one's whole life. Each person at different periods of life learns by using his/her experience and values, and all this learning is made up of certain scenarios. At the same time a kind of system exists within the person him/herself. What happens is learning based on understanding, and this understanding is what allows the mind to learn. Piaget, Dewey and Vygotsky support this idea and were supporters of this understanding of constructivism.

The author of this study, agreeing with these constructivist ideas, in the context of this dissertation accents adult learning to learn at different periods of life, with learners using their experience and values. To summarize, the development of methodological research provisions has relied on constructivist ideas focused on adult (young, middle aged or senior) learning to learn.

### 2.2. Research Design and Stages

In order to more clearly describe the goal of this dissertation, which is to look at the reflective experience of adult learning to learn, focusing on key dimensions of the competence of learning to learn in the paradigm of lifelong learning, the author seeks to formulate and carry out certain stages of this research which are connected among themselves in a logical way.

In the first section of this dissertation analysis of research literature has helped answer questions raised by the first and second tasks of the dissertation. Two of the constructions arising from theory are given. The first construct, “Construct of learning to learn by adults“, shows the conception of adult learning to learn, and emphasizes the components in learning to learn, which have already been indicated in research work.

The second construct, „Construct of the expression of the reflective experience of adult learning to learn“ is considered, modified and adapted to concepts in the issues of adult learning to learn.

Theoretical models helped prepare the different stages of empirical research by formulating questions for the groups being researched.

In the second research stage two levels of qualitative research were carried out. This research was done very precisely in order to respond to the task identified at the beginning of this dissertation: to identify adult learning to learn needs and possibilities and their influence on personal, professional and social activity.

The quantitative research also consisted of two levels. During the period of the first level an investigative research was carried out which helped validate the qualitative research tool, the questionnaire.

During this second stage, using questionnaires, a national quantitative research was carried out which helped identify the needs and possibilities and their influence on personal, professional and professional activity.

In the third research stage qualitative research was done which sought to identify the expression of competences in adult learning to learn at the early, middle and late periods of age. This work was made up of three levels: the first level A was interviews in writing with adults, “the early adulthood group”; the second level B comprised interviews in writing “the middle adulthood group”; and the third qualitative research level C included the “seniors focus group” while level D included another focus group, “late adulthood”.

The qualitative research revealed the reflective experience of adult learning to learn at different age periods, including values, knowledge, habits and personal qualities. In this way scenarios of adult learning to learn at different ages became clear.

The logical progress of the research is laid out in this order since the author of the dissertation, who had the opportunity to travel abroad and bring into her research material from the international sphere, arranged in advance to carry out research while abroad and also worked according to the schedule of gatherings in Lithuania, when participants in this research from abroad were visiting Lithuania.

The national quantitative research was carried out in Lithuania within the framework of a project funded by the Lithuanian Science Council. In this way a situation formed that was suitable with the possibility to investigate the phenomenon of learning to learn in the national context.

For comprehensive investigation of the researched phenomena, quantitative and qualitative research approaches were applied.

Depending on the particular research stage (see Fig. 11), either qualitative or quantitative research methods and sometimes both were used.

The conception of triangulation of methods (Guba, Lincoln, 1989; Merkys, 1999; Denzin, Lincoln, 2003; Kardelis, 2002 et al.) is based on a systemic methodological approach where qualitative and quantitative research methods are combined and integrated. Qualitative and qualitative analyses are combined in the research to ensure reliability and consistency through the combination of the research participants' subjective and objective information.

The author of the dissertation chose qualitative research strategy approaches and followed these steps to give meaning to the research participants' thoughts and to interpret the research data:

- selecting and sampling research participants;
- setting a focus group;
- participation in a focus group;
- collecting data;
- treating research participants' words with empathy and adequate attention;
- data analysis;
- making initial decisions on key aspects and themes;
- designing key structure using the authentic thoughts of participants and presenting information received from the focus group in a certain way (table or narration), hereinafter referred to as construction;
- testing the construction by analysing scientific literature and contrasting it to other groups by asking them identical questions;
- identifying the key topic that defines the researched phenomenon and interpreting the significance of the phenomenon;
- testing the key structure (results);
- describing and generalising results (the steps of the research according to Schwandt, 1994, Bitinas et al., 2008, Vitkauskaitė, 2009).

The following procedures were used in the research:

Suitable research participants are selected. The most important selection criterion is that the participant should be experiencing the phenomenon that is researched and should be interested in it. Research participants become co-workers for the researcher; thus, interpersonal communication and empathy are highly important in the research: "...the object of qualitative research is informants' knowledge on their experiences and the construct of their experiences" (Bitinas, Rupšienė, Žydžiūnaitė, 2008, p.125).

**Qualitative content analysis**

This type of analysis focuses on interpreting primary textual information in the context of a particular scientific field, approach or category rather than discussing qualitative evaluations and frequencies of features identified by the researcher.

Qualitative informant sampling was selected, i.e. people with responsible reasoning on the researched issue were chosen to participate in the research. Thus it could be expected that among already known statements and conclusions, the research will provide new ideas that, once appropriately interpreted by a researcher, could supplement the theory of the research object.

The aim of the research is to identify key features of the researched phenomenon, i.e. the reflective experience of adult learning to learn.

Primary data – text in any form.

Significance of research conclusions – new aspects illustrating the researched phenomenon are identified and characteristics of the same phenomenon described in other research are confirmed and supported.

Validation of results is based on the content of the analysed text and its categories and subcategories.

**Advantages and criticism of qualitative content analysis**

The possibilities of qualitative content analysis application are largely determined by the nature of the analysed text, i.e. the more structured the content of the analysed text is, the more suitable it is for content analysis. And, on the contrary, the more subtle and sophisticated the content is, the less possible it is to use it for content analysis. Therefore, focusing on the subtle , the "author considered it important to present the data in participants' own voice, therefore, quotes have been used to present the findings, with the author's voice providing any links to facilitate the flow for the reader" (Jindal-Snape, Holmes, 2009, p. 222). For the presentation of research participants' thoughts and ideas, this dissertation presents a number of tables with categories and subcategories, along with relevant texts and examples (narration with authentic insertions).

The overall design of the research is provided in Figure 11.

**The first stage** focused on the analysis of scientific literature analysis that helped to validate the conception of adult learning to learn, highlighting adult learning to learn abilities and certain learning to learn scenarios. After reviewing this literature, a theoretical framework for further empirical research was presented in an adult learning to learn model.

**The second stage** of the dissertation research focused on quantitative exploratory research that was carried out during the period from the 1st of October to the 1st of December.

The questionnaire was available online. An e-questionnaire was filled in by 100 respondents and 40 people filled in the paper questionnaire.

Explorative research then helped to reveal adult learning to learn trends in Lithuania. After this exploratory research, the main research instrument was revised and corrected.

**The third stage.** Quantitative research was carried out during the period from March to July.

The aim of this stage was to identify the relevance and necessity of learning to learn and to define its application spheres in the Lithuanian context.

The questionnaire was available online. Paper questionnaires were also available.

2575 respondents participated in the research.

**The fourth stage,** qualitative research Learning to learn experience in early adulthood was carried out at Masaryk University, Brno, Czech Republic, during the period from the 29th of August to the 3rd of September. Participants of this research were 23 young adult learners participating in the process of learning (4 males and 19 females) from 5 countries, namely Italy, Czech Republic, Hungary, Serbia and Germany.

Similarly to Group C, learners from this group were provided with written questions about their activity (EMAE camp), i.e. what new they learnt during this activity. Slight differences were noted in the ways that questions were provided to the two groups. In this group, taking into consideration the breadth of question on skills, values and personal characteristics, research participants were given space to separately enter answers on skills, values and personal characteristics. This question was then followed by other questions on participants' competence, changes in practical experience (from the arrival day to their departure day). Research participants were also asked to answer what reflective practice means to them.

**The fifth stage** focused on the research aimed at reviewing learning to learn experiences in middle adulthood. Group C consisted of 20 adults (young researchers, 14 females and 6 males). This research was carried out at Vytautas Magnus University, Lithuania, during the period from 16th to 29th of June.

Research participants were learners from 6 countries: Italy, Latvia, Lithuania, Poland, Portugal and Spain.

Learners were provided with written interview questions. Identically to the other adults focus groups (senior learner groups E and F), this group of doctoral students was provided with six written interview questions. However, they were additionally asked a question regarding reflective practice in order to better reveal adult learning to learn abilities (one of abilities of the competence of learning to learn, i.e. reflection on one's own learning and activity) and to have a better understanding of the conception of the competence of learning to learn.

**The sixth stage** was devoted to qualitative research of the reflective assessment of senior adults learning to learn. This research was carried out in July and October. In this research, data was collected by applying the method of focus-group interviews. Two focus groups were used to determine the reflective assessment of senior learners' learning to learn, highlighting learning to learn abilities characteristic to that particular period of age. 11 senior adults participated in the research. The first focus group (E) involved 6 Greeks (4 females and 2 males) while the second focus group (F) had 5 Lithuanians (4 females and 1 male).

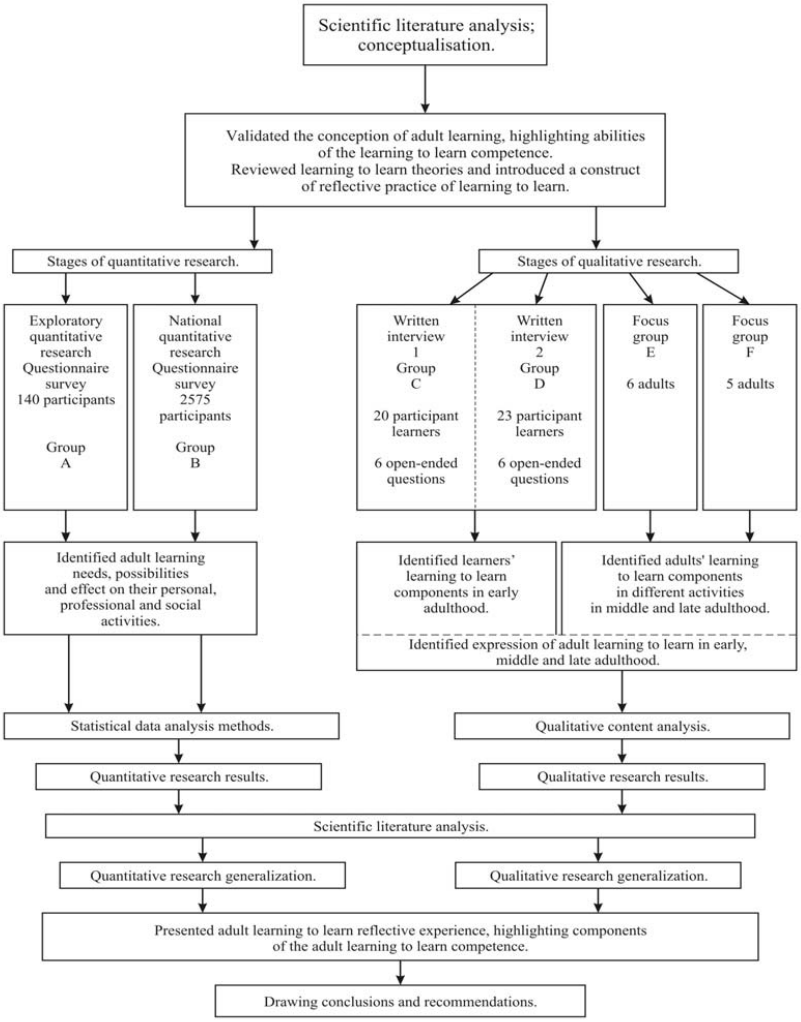



*Fig. 11. Research design scheme*

The research methods mentioned above are applied in the dissertation. Depending on particular research stages (see Fig.11), either qualitative or quantitative research are used. Focus group interviews, written surveys (interviews), open-ended questions and written reflection as well as semi-structured interviews were used in qualitative research. Content analysis was applied to analyse collected data (Fenneteau, 2002; Cohen, Manion, Morrison, 2007; Patton, 1990; Silverman, 2000, 2001; Travers, 2001).

Research material is provided in the form of research participants' opinion on their activity and experience (Moen, 2006, Kokybiniai edukaciniai tyrimai, 2012). Research results are presented as text, emphasising the experience of research participants' learning to learn.

## 2.3. Empirical Quantitative and Qualitative Research Methods and Organization of the Research

This section presents quantitative and qualitative research methods. The research was carried out in 2012-2014. The description of each research methodology, information about the research aim, the research instruments, the research stages and respondents, and the research restrictions are provided. Finally, ethical issues of the research are briefly discussed.

### 2.3.1. Adult Competence of Learning to Learn

**Research Aim**

The aim of this research was to reveal the situation of adult learning to learn in Lithuania.

**Research instrument**

Research participants were provided with a structured questionnaire (Anex12). The questionnaire had two main parts, i.e. the first part involved demographic questions and information on generic competences, and the second part had questions related to the competence of adult learning to learn.

Research participants had to answer questions on the application spheres of generic competence, including questions on the importance of generic competences in career, social and personal activities.

Respondents were asked how they apply different methods for the development of generic competence and how various factors influence their development. This part of the questionnaire also aimed to find out obstacles for the development of generic competence.

One particular section of the questionnaire on learning to learn focused on evaluating the relevance of the learning to learn competence in the national context. To achieve this aim, research participants were asked which ability of learning to learn is the most significant in identified spheres.

It is important to reveal how research participants assess the competence of learning to learn.

The researcher was also interested in the acquisition methods used for the learning to learn competence. Therefore, research participants were asked how they learn in order to develop the competence of learning to learn. They had to indicate how certain learning methods facilitate their learning.

The researcher aimed to find out what prevents learners from acquiring and developing the competence of learning to learn.

A separate question was given in order to evaluate the importance of research participants' problem solving abilities.

The research also focused on factors that stimulate the development of the learning to learn competence.

In addition, the questionnaire involves questions on job retention and the effect that the learning to learn competence has on individuals' professional life (employability, employment status and quality etc.). Moreover, the researcher aimed to analyse the effect of the learning to learn competence on individuals' participation in social activity.

**Research stages and respondents**

The questionnaire was available online. 140 respondents filled in electronic and paper questionnaires.

**Research restrictions**

As the questionnaire was provided online, not all respondents could be contacted for questionnaire corrections. After identifying complex and difficult aspects of the provided questions, the instrument had to be revised after the exploratory research.

### 2.3.2. Learning, Personality and Citizenship Development

**Research aim**

The aim of this research was to identify how relevant and important learning to learn is in the Lithuanian context and reveal its application spheres.

**Research instrument**

A structured questionnaire-survey was used in the quantitative research to identify adult learning to learn needs, possibilities and influence on their personal, professional and social activity.

The research instrument, provided in Annex, was prepared by the authors of the LMT project group. The research *VP1-3.1-ŠMM-07-K* was funded by the European Social Fund under the Global Grant measure.

The questionnaire was available online. It had two main parts: "general" (1) and "learning to learn" (2). Questions of this research instrument were reformulated after the exploratory research in order to make them easier to understand for the research groups.

The first section of the **general questionnaire part** includes demographic questions (research participants' gender, marital status, place of residence, education and employment). The other section focuses on generic competences. The question on the use of generic competences in certain spheres, professional activity, career, social life and personal

development, helped to find out how important they are to respondents ("very important", "important", "not very important", "unimportant"). Another question focused on the importance of eight generic competences. The third question was related to the development of generic competences, i.e. participation in seminars and lectures, independent learning, distant learning, using internet and various software, learning through TV and radio, analysing literature resources, and learning through daily activities. The development of generic competences is stimulated by various factors, including daily life needs, looking for a new job, career aspirations, self-realisation, support from friends and society, will to improve, help from family and others, family support and leisure activities. Then the fourth question of the questionnaire helped to find out if these various factors are important to research participants. The fifth question focused on respondents' opinion on obstacles, lack of funds, too expensive learning services, lack of time, learning fees, lack of support from work colleagues and family members, having no opportunities to learn, being unaware of where to learn, lack of will to learn, seeing no purpose in learning, and the lack of personal features that disturb the development of generic competences.

**The specific part of the questionnaire** was devoted to questions on the learning to learn construct. This third group of questions focused on respondents' opinion on certain statements, i.e. their suitability to describe learning to learn. A five-point ranking scale was chosen to mark responses ("agree", "more agree than disagree", "do not know", "more disagree than agree"and "do not agree"). The question related to statements on learning to learn and to how abilities help to learn various things derived from the theoretical part of the dissertation where learning to learn abilities are described (sections). A five-point ranking scale was used to mark responses ("helpful", "more helpful than unhelpful", "do not know", "more unhelpful than helpful" and "unhelpful"). The third question in this group focused on how learning to learn helps one to look for jobs, to retain jobs, to pursue professional careers and to participate in social activity. 6 possible responses were provided: "very helpful", "more helpful than unhelpful", "more unhelpful than helpful", "totally unhelpful", "do not know" and "I do not do that, I do not need that".

Yet another group of questions focused on evaluating job searches, job retention and professional career pursuit. Closed questions with yes-no and predefined answer variants were provided so that different age respondents could select the most appropriate block of questions, skipping irrelevant questions.

Questions were formulated following the aspects of the theoretical part, presented in the dissertation.

**Research stages and respondents**

The research was conducted during the period of six months. Research questionnaires were available online. Besides, research participants could also be provided with paper variants. Research participants were from different age groups - early, middle and late adulthood.

The respondents were adults. The total planned number of participants to be surveyed was 2000, while the total number of surveyed participants was 2575. The representativeness of the sample was calculated following set requirements. Statistical descriptive data analysis and statistical relationship research methods were used for quantitative data management. SPSS software, descriptive statistics and multidimensional statistical methods were used for statistical data analysis.

In order to answer research questions, statistical relationship research was conducted and correlations were calculated.

**Research restrictions**

As the majority of questionnaires were filled in remotely, this process could hardly be controlled. Therefore, the researcher faced difficulties when managing data without distorting information. Incorrect questionnaires were filtered and those that were filled in using the same password were checked several times. Only the correct questionnaires were included in the research.

### 2.3.3. Methods of the Qualitative Research: the Competence of Learning to Learn in Adult Education

In this chapter the methods of the qualitative research the Competence of Learning to Learn in Adult Education are presented. The stage of this survey was to review learning to learn experience in early and middle adulthood. Further, the research aim, instruments, the research stages, the sample and the research restrictions are described.

#### 2.3.3.1. Young Adults' Learning to Learn Process

**Research Aim**

The aim of this research was to review young adults' experience of learning to learn.

**Research Instrument**

This group of participants was provided with written research questions at Masaryk University, Brno, Czech Republic. Participant learners had to answer questions about their

EMAE activity and how this activity enriched their knowledge. Slight differences were noted in the ways that questions were provided to this and the previous group. In this group, taking into consideration the breadth of the question on skills, values and personal characteristics, research participants were given more space to separately enter answers on skills, values and personal characteristics. This question was then followed by other questions on the participants' competence, changes in practical experience (from the arrival day to their departure day). Research participants were also asked to answer what reflective practice is.

**Research stages and respondents**

23 first and second study cycle university students, involved in the process of learning, participated in this research (4 males and 19 females). The research took place at Masaryk University, Brno, Czech Republic, from the 29th of August to the 3rd of September in 2013. Research participants were from 5 countries, including Italy, Czech Republic, Hungary, Serbia and Germany. The majority of participants were young adults (22-26 years of age; early adulthood). Some of the participants were in middle adulthood (35 and 47 years of age).

Research participants were selected by applying a target sample, criterion sampling method which involves searching for individuals who meet the set criteria, in this case, participating in the learning process at the time of the research. Criterion sampling ensures that high-quality data are collected (Rupšienė, 2007).

*Table 2. Qualitative research group D: respondents' characteristics.*
*Distribution by country and gender*

| **Country** | **Number of participants** | **Females** | **Males** |
|---|---|---|---|
| Czech Republic | 4 | 3 | 1 |
| Italy | 5 | 4 | 1 |
| Serbia | 7 | 6 | 1 |
| Hungary | 6 | 5 | 1 |
| Germany | 1 | 1 | - |
| **Total** | **23** | **19** | **4** |

One male and three female participants came from the University of Florence in Italy. Masaryk University, Czech Republic, was represented by four participants (three females and one male). Six participants represented Hungarian universities (five females and one male). Seven participants came from the University of Belgrade in Serbia. Finally, one female participant came from the University of Duisburg-Essen. Detailed characteristics of these participants are provided in the tables, Annex 9.

**Research restrictions**

The majority of research participants were female (4 males and 19 females).

#### 2.3.3.2 Methods of the Qualitative Research Learning to Learn Experience in Early and Middle Adulthood

**Research aim**

The aim of this research was to review learning to learn experience in early and middle adulthood.

**Research instrument**

Third cycle students received their interview questions in written form. Another method that was used was written reflection.

Similarly to focus group (senior groups A and B) interviews, PhD students were given six questions. However, for more comprehensive analysis of the conception of the adult learning to learn competence (one of abilities of lifelong learning, i.e. reflecting on own learning and activity), they were also given one additional question about reflective practice. The question was related to the activity in which learners participated. It differed from focus group interviews where participants, when asked the first question, also provided answers to another question related to their activity in other institutions. In this case, the decision was made to join questions about different activities into one question on learners' activity in general.

**Research stages and respondents**

This research involved 20 young and middle-aged PhD students (14 females, 6 males). The research was conducted at Vytautas Magnus University.

Research participants were from 6 countries, Italy, Latvia, Lithuania, Poland, Portugal and Spain.

*Table 3. Qualitative research group C: respondents' characteristics. Distribution by country and gender*

| **Country** | **Number of participants** | **Females** | **Males** |
|---|---|---|---|
| Spain | 4 | 2 | 2 |
| Italy | 3 | 2 | 1 |
| Latvia | 3 | 3 | - |
| Poland | 3 | 2 | 1 |
| Lithuania | 3 | 1 | 2 |
| Portugal | 4 | 4 | - |
| **Total** | **20** | **14** | **6** |

3 participants of the research were from Vytautas Magnus University in Lithuania (2 males and 1 female). 4 female learners were from the University of Latvia. Another 4 learners (2 males and 2 females) came from the University of Oviedo in Spain. 3 respondents (1 male

and 2 females) came from the Jagiellonian University in Poland. 3 learners (2 females and 1 male) were from University of Pavia in Italy and, finally, 4 female learners came from the Aveiro University in Portugal.

A detailed characteristics of group C participants are provided in the tables , Annex 6 .

**Research restrictions**

The number of female research participants exceeded the number of male participants (15 females, 6 males).

### 2.3.3.3. Reflective Assessment of Adult Learning to Learn in Middle and Late Adulthood

The first qualitative research was carried out in July and October. In this research, data was collected by applying the method of focus-group interview. This method is used to gain a better understanding of individual behaviour in a particular situation or approaches to a chosen research problem (Bitinas, Rupšienė, Žydžiūnaitė, 2008). The author emphasises the fact that group members interact when this method is applied. As a result, research participants' beliefs and values are identified.

Two focus groups were used to determine the reflective assessment of senior learners' learning to learn, highlighting learning to learn abilities characteristic to that particular period of age (participants from 53 to 60 years old belong to the middle adulthood group, while those from 61 to 65 years old belong to the group of late adulthood). 11 seniors participated in the research. The first focus group involved 6 Greeks, while the second focus group had 5 Lithuanians.

**Research aim**

The aim of this research part was to highlight the reflective experience of adult learning to learn.

The purpose of this research was to present the attitudes of adults from different countries and cultures towards learning to learn.

**Research instrument**

Focus group interviews were used to discuss different aspects of experience. Interviews were not strictly structured. The order of questions could be changed following the discussion and sometimes several questions could be joined together.

Six questions were given to research participants. Specific interview methods ensured the participants' involvement and fluency (Krueger, 1998, Mickūnaitė, 2007). The questions, provided in Annex, were formulated when preparing for the focus group interview. In order to

achieve the set aim, an introductory question asked what the participants gained from practical activity, while other key questions were related to adult participation in activity, the novelty and originality of the activity and difficulties and challenges faced when participating in the process. Other questions were related to seniors' professional skills, values and personal characteristics. The research also aimed at identifying seniors' competence involving knowledge, skills and abilities emphasised during the activity. The last (i.e. sixth) question asked participants to identify some distinctive features of their activity. The first group participants were seniors. This research took place in the conference hall of the hotel in Kaunas, Lithuania, where the research participants were living. The focus group was led by the author of this research. Research participants were introduced to the purpose of the meeting in advance. In the meeting, the researcher informed the participants that their discussion will be recorded and information will be later used for research purposes, following ethical principles. Research participants' names and opinions are coded. This focus group interview lasted for 1.5 hours.

The second focus group had five senior participants from Lithuania. It was organised at Vytautas Magnus University. Similarly to the first focus group interview, its participants were introduced to the purpose of this research, informed that their discussions will be recorded and used for research purposes and that their names and opinions will be coded. The focus group interview lasted for 2 hours.

Tables 2 and 3 provide information on the characteristics of participants in Group E and Group F.

*Table 4. Research participants' characteristics: group E "foreigners"*

| Code | Gender | Age | Activity | Education | Profession |
|---|---|---|---|---|---|
| E | female | 58 | pensioner | higher | Economist |
| F | female | 60 | freelance artist | higher | Designer |
| G | female | 61 | pensioner | higher | Teacher |
| H | female | 67 | pensioner | higher | Teacher |
| I | male | 54 | pensioner | higher | Engineer |
| J | male | 55 | pensioner | higher | Official |

Six adults from Greece (four females and two males) wee involved in this focus group. Five of them were pensioners and one was a freelance artist. All the participants had higher education. Informants were representatives of different professions, namely, an official, an engineer, two teachers (language and physics), an economist and a designer.

Research participants' age varied from 54 to 68. According to Jovaiša's categories (2011), participants' age varied, i.e. middle adulthood and late adulthood.

*Table 5 Research participants' characteristics: group F "natives"*

| Code | Gender | Age | Activity | Education | Profession |
|---|---|---|---|---|---|
| E1 | female | 65 | Teacher | higher | Teacher |
| F1 | female | 59 | Nurse | special secondary | Nurse |
| G1 | female | 60 | lecturer | higher | Lecturer |
| H1 | female | 54 | pensioner | higher | Doctor |
| I1 | male | 68 | pensioner | higher | Veterinarian |

This focus group consisted of five adults from Lithuania, one male and four females. Two of them are pensioners and the remaining three were employed at the time of the research. Research participants' occupations varied: teacher, lecturer, nurse, doctor and veterinarian.

As mentioned earlier, content analysis was applied for the analysis of focus group interviews.

Interview data are analysed by dividing them into segments and looking for meaningful combinations and topics. Different cases are compared; the data of each case are synthesised and generalised in a textual or structural description (Kardelis, 2007).

**Research restrictions**

Participants in group E were seniors from Greece. Two of them had difficulties in communicating in English. Therefore they answered the questions in Greek and one of their fellow colleagues and research participants translated their answers into English. In some cases the researcher had to ask for clarification and to repeat the same questions so as not to distort the data.

Some of the questions helped the participants to remember what they have not told yet or to emphasise certain things and fluently end their focus group interview.

**Research stages and respondents**

Phases of focus group (group E and group F) interviews.

Two focus group interviews were completed.

The first group discussion (focus group) had six seniors actively involved in the activity. The participants' age was one of selection criteria. The target sample of the first qualitative research focused on respondents older than 51 years of age, elderly people, retired pensioners or those who are about to retire. Participants at this stage are divided into two age groups: 53-60 years of age (middle adulthood) and 61-65 years of age (late adulthood). This stage aimed at highlighting the adult (reflective) experience of learning to learn in activity and adult abilities (competence) of learning to learn in activity at this particular age group.

**Research ethics**

The following ethical principles were followed in the research: autonomy, goodwill, justice, and confidentiality (Orb, Eisenhauer, Wynaben, 2001). Respondents were involved in the research by following the principles of information, equivalence and voluntariness (Bubnys, Žydžiūnaitė, 2012, Žydžiūnaitė, 2007, Patton, 2002).

Research participants decided to participate in the research themselves and could freely express their opinion. They were not influenced from outside so the principle of autonomy was ensured.

Respondents were aware of the research aim, data use and provision. So the principle of goodwill was also followed. All research participants were forthcoming. Analysis of data provided by all participants ensured the principle of justice.

Confidentiality was ensured by coding all respondents' names.

# 3. RESULTS OF RESEARCH ON THE REFLECTIVE EXPERIENCE OF ADULT LEARNING TO LEARN IN EARLY, MIDDLE AND LATE ADULTHOOD

This section presents the results of quantitative and qualitative research highlighting learning to learn dimensions, which are important for the development of learning during the life span. Moreover, assessments of learning to learn are provided taking into consideration adult learners' opinions in young, middle and late adulthood.

## 3.1 Adult Learning to Learn Competence: Exploratory Research Results

The research analysed the importance of key competences (KC) in four main spheres, focusing on professional activity, solving work tasks; professional career pursuit; fulfilling social, cultural and civil obligations; and personal development.

The majority of the research participants, i.e. 34%, were 40-49 years of age, 28% of respondents - 30-39 years of age, 24% - 18-29 years of age, 8% - 50-59 years of age, 4% - 70 years of age and older and 2% - 60-69 years of age (Fig. 12).

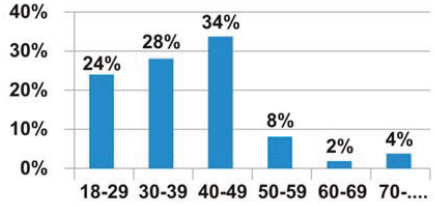



*Fig. 12. Respondents' age*

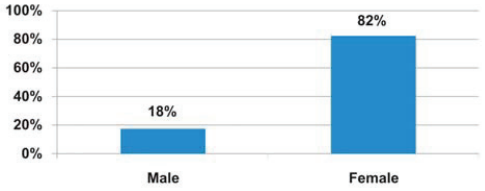



*Fig.13. Respondents' sex*

82% of the research participants were female and 18% - male (Fig. 13). Research participants' marital status is presented in Figure 14 and their employment status in Figure 15.

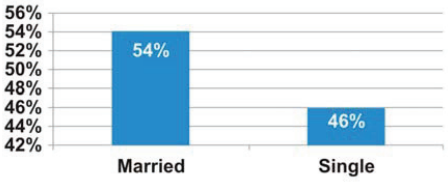



*Fig. 14. Respondents' marital status*

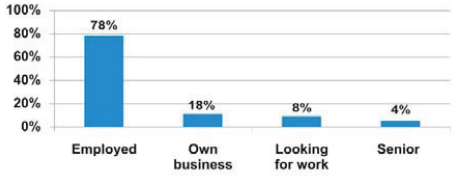



*Fig. 15. Research participants' employment status*

Research participants' distribution by marital status: 54% - married, 46% - single.

78% of research participants were employed, 10% had their own business, 8% were looking for work and, finally, 4% research participants were seniors. The largest group of the participants were employed individuals.

Research participants' distribution by their place of residence is presented in Figure 16.

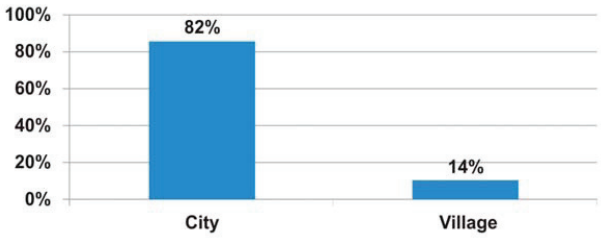



*Fig. 16. Research participants' place of residence*

86% of the research participants live in cities while the remaining 14% live in villages. Thus city residents form the largest group of research participants.

In order to determine the importance of key competences for research participants' personal development, fulfilling social, cultural and civil obligations; professional career pursuit, and professional activity, solving work tasks, research participants were asked to mark the answer which best reflects the importance, i.e. very important, important, not very important, unimportant, do not know.

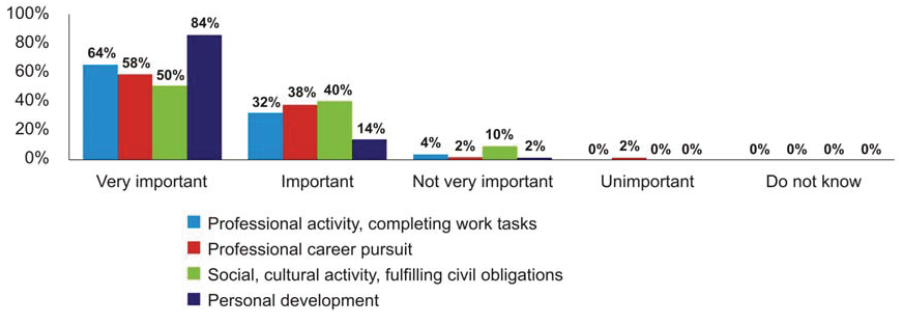



*Fig. 17. The importance of key competences in different spheres*

As the research results (Fig. 17) indicate, the majority of respondents (84%) believe that key competences are very important for personal development. 64% respondents indicated that key competences are very important in professional activity and when completing work tasks. 58 % respondents claim that key competences are very important when pursuing a professional career.

50% of research participants understand that key competences are important in social and cultural activity, as well as in fulfilling civil obligations. 40% of answers proved the importance of key competences in social and cultural activity, as well as in fulfilling civil obligations; 38% respondents emphasised the pursuit of a professional career; 32% believe KCs to be important in professional activity and completing work tasks, while 14% think them to be important for personal development.

10% respondents indicated that KCs are not very important in social, cultural activity and fulfilling civil obligations; 4% of them said that KCs are not very important in professional activity and completing work tasks, while 2% agreed that KCs are not very important in personal development and another 2% in the pursuit of a career. Only 2% of the research participants indicated that KCs are unimportant in the pursuit of a professional career.

To summarise these results, it could be noted that key competences are very important to research participants; they are treated as the most important in the field of personal development, followed by professional activity, completing work tasks, professional activity pursuit and social, cultural activity and fulfilling civil obligations.

Figure 18 presents the significance of the abilities of the learning to learn competence in the presented spheres: professional activity, career pursuit, participation in social activity and personal development.

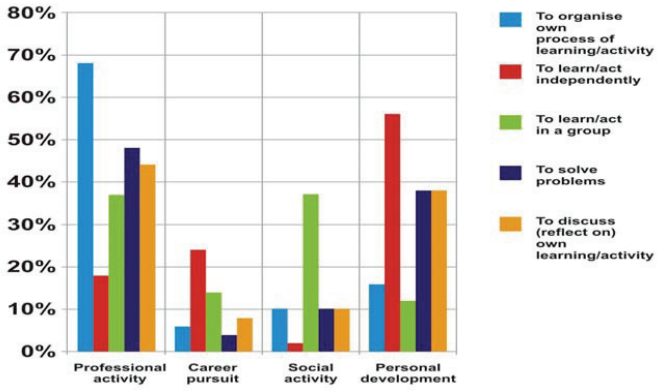



*Fig. 18. The significance of abilities of the learning to learn competence in different spheres*

The majority of respondents (68%) indicated that the most significant ability in professional activity is the ability to organise their own process of learning/activity. 44% claimed that their ability to discuss (reflect on) their own learning/activity is significant in professional activity while 37% of participants emphasised their ability to learn and act in a group. 18% of them noted the ability to learn and act independently. When talking about the

pursuit of a career, 25% respondents highlighted the importance of their ability to learn and act independently and 14% - learning and acting in a group. 8% of the participants noted the importance of being able to discuss and reflect on their own learning and activity in career pursuit and 5% said that it is important to be able to organise their own learning. Only about 4% respondents believe the ability to solve problems to be important when pursuing a career.

**Participation in social activity**

38% respondents indicated their ability to learn and act in a group to be significantly important when participating in social activity. 10% of the participants believe their abilities to organise the process of their own learning and activity to be important, another10% focus on the ability to solve problems and yet another 10% on the ability to reflect on their own learning and activity. Only 3% respondents highlight the importance of independent learning and activity.

**Personal development**

In the sphere of personal development, 56% of the research participants highlighted the ability to learn and act independently. Two groups of 38% noted the importance of the ability to solve problems and the ability to discuss and reflect on their own learning/activity. 26% respondents said that being able to organise their own learning/activity is significant for personal development and 12% of them noted the importance of being able to learn and act in a group.

To conclude, it can be noted that the ability to organise the process of one's own learning and activity is the most important in the sphere of professional activity. The most important ability when pursuing a career, according to the participants, is being able to learn and act independently. Being able to learn and act in a group is indicated as the most important ability in social activity. Finally, the ability to learn and act independently is the most significant in the sphere of personal development.

Assessment of abilities of the learning to learn competence is provided in Figure 20.


*Fig. 19. Assessment of abilities of the learning to learn competence*

The participants assessed their learning to learn competence, distinguishing separate abilities. 50% respondents evaluated their ability to learn and act independently as very good. The same percentage of respondents (50%) said that their ability to discuss and reflect on their own learning and activity is very good. 38% of the participants believed their ability to organise the process oft heir own learning and activity to be very good while 31% respondents thought their ability to solve problems to be very good.

60% respondents evaluated their ability to organise their own process of learning and activity as average; another 60% - their ability to solve problems. 52% respondents evaluated their ability to learn and act in a group as average. 40% respondents evaluated their ability to learn and act independently as average. 44% respondents assessed their ability to discuss and reflect on their own learning/activity as average. The same assessment was given by 40% respondents about their ability to learn and act independently. Around 11% research participants poorly evaluated their ability to learn and act in a group, 10% respondents poorly evaluated their ability to learn and act independently, 6% of the participants poorly evaluated their ability to solve problems and another 6% - their ability to reflect on own learning. 2% respondents poorly evaluated their ability to organise their own process of learning and activity. Only 2% of the participants did not know how to evaluate their ability to solve problems. In general it is worth noting that the participants evaluated their abilities to learn and act independently and to reflect on their own learning/activity as very good. The majority of them evaluated their abilities to organise own learning/activity, to solve problems and to learn and act in a group as average.

Figure 20 presents learning methods used by the research participants to develop the competence of learning to learn.

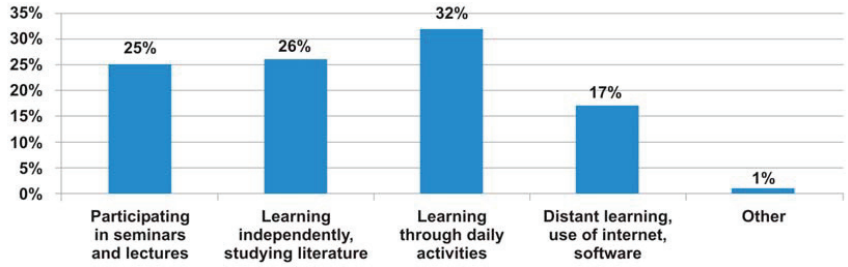



*Fig. 20. Learning methods used to develop the competence of learning to learn*

In order to develop the competence of learning to learn, 32% participants learn through daily activities, 26% learn independently, analysing literature, 25% by participating in seminars and lectures, 17% use distant learning, internet or computer software and only 1%

use other methods. Having the aim to develop the competence of learning to learn, many respondents highlighted the importance of learning through daily activities, independent learning (literature), and learning in seminars and lectures.

Learning methods that help individuals to learn are provided in Figure 21.

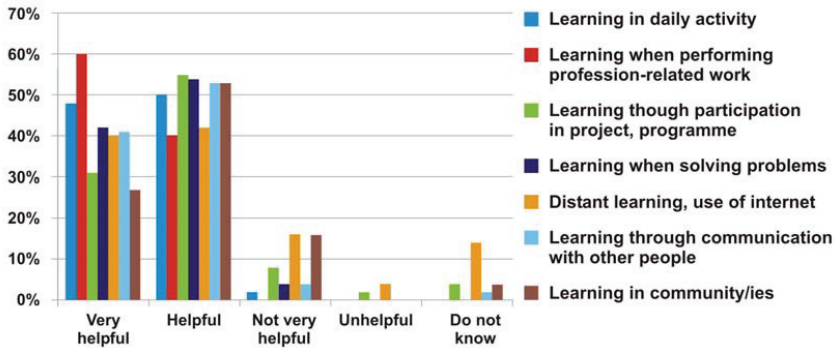



*Fig. 21. Learning methods that help to learn*

60% respondents noted that profession-related work is very helpful when learning. Learning through daily activities is very helpful for 48% respondents. Very useful methods of learning are: learning through solving problems – 41% respondents; learning through communication with others – 41% of respondents; 30% - learning through participation in project or programme; 27% - learning in communities; 24% - distant learning, use of internet. 54% of the research participants find learning through participation in a project or programme helpful. 53% believe learning when solving problems to be helpful; 52% respondents highlighted learning through communication with other people and yet another 52% - learning in communities. 41% participants indicated that distant learning through internet is helpful, while, on the contrary, 15% respondents said that distant learning through internet is not very helpful. Another 15% said the same about learning in communities. Learning through participation in a project or programme is not very helpful for 8% respondents. Learning through communication with other people and learning when solving problems is not very helpful to 4% of the participants. 2% respondents find learning through daily activities not very useful. Distant learning does not help 4% of the research participants and learning through participation in a project or programme - 2% of the research participants. About 15% respondents do not know if distant learning is helpful; 4% respondents could not answer if learning through participation in a project or programme and learning in communities are helpful. 2% respondents did not know if learning through communication with other people is helpful.

Analysing how different learning methods help to learn, research participants highlighted and noted that learning through profession-related work as well as learning through daily activities are very helpful.

Respondents' opinion about what is important for learning are presented in Figure 22.

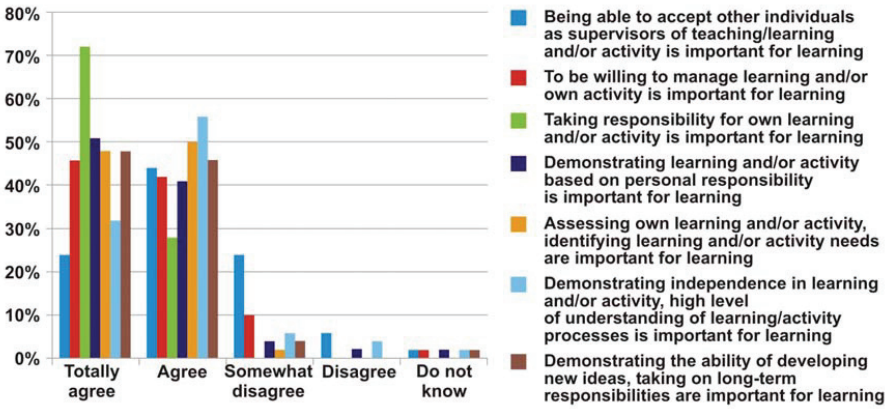



*Fig. 22. Respondents' opinion about statements defining what is important for learning*

72% respondents totally agree with the statement that taking responsibility for their own learning and/or activity is important for learning. 51% respondents totally agree with the statement that demonstrating learning and/or activity based on personal responsibility is important for learning. 48% research participants totally agree that assessing their own learning and/or activity, identifying learning and/or activity needs, as well as demonstrating the ability to develop new ideas and take on long-term responsibilities are important for learning. Around 46% respondents totally agree that it is important to try and manage their own learning and/or activity. 32% research participants totally agree that demonstrating independence in learning and/or activity, and a high level of understanding of learning/activity processes is important for learning. Around 24% respondents totally agree with the statement that being able to accept other individuals as supervisors of teaching/learning and/or activity is important for learning.

Around 56% respondents agree that demonstrating independence in learning and/or activity, and a high level of understanding of learning/activity processes is important for learning. 50% respondents agree that assessing own learning and/or activity, identifying learning and/or activity needs are important for learning. 45 % of the participants agree that demonstrating the ability of developing new idea and taking on long-term responsibilities are important for learning. 44% respondents agree being able to accept other individuals as supervisors of teaching/learning and/or activity is important for learning. 42% of the participants agree that to be willing to manage learning and/or their own activity is important

for learning. 41% respondents agree that it is important to demonstrate learning and/or activity based on personal responsibility. 28% of them agree that it is important to take responsibility for own learning and/or activity is important for learning. 24% respondents somewhat disagree that it is important to be able to accept other individuals as supervisors of teaching/learning and/or activity is important for learning. 10% of them somewhat disagree with the statement that to be willing to manage learning and/or own activity is important for learning. Around 6 % of the participants somewhat disagree with the statement that it is important to demonstrate independence in learning and/or activity and a high level of understanding of learning/activity processes. Two groups of respondents (4% each) somewhat disagree with the statements that demonstrating learning and/or activity based on personal responsibility is important for learning and that demonstrating the ability of developing new ideas, taking on long-term responsibilities is important for learning. Around 2% of the participants somewhat disagree with the statement that assessing their own learning and/or activity, identifying learning and/or activity needs are important for learning. Around 6% respondents disagree with the statement that being able to accept other individuals as supervisors of teaching/learning and/or activity is important for learning. 4 % of them disagree with the statement that demonstrating independence in learning and/or activity and a high level of understanding of learning/activity processes is important for learning. 2% respondents disagree with the statement that demonstrating learning and/or activity based on personal responsibility is important for learning. Several groups of respondents (2% each) indicated that they do not know if being able to accept other individuals as supervisors of teaching/learning and/or activity is important for learning; if being willing to manage learning and/or own activity is important for learning; if demonstrating learning and/or activity based on personal responsibility is important for learning; also, they do not know if demonstrating independence in learning and/or activity and a high level of understanding of learning/activity processes is important for learning; if demonstrating the ability to develop new ideas and take on long-term responsibilities are important for learning.

To conclude, it can be noted that the majority of research participants, i.e. 72%, totally agree with the statement that taking responsibility for one's learning and/or activity is important for learning.

Obstacles that learners face when developing the competence of learning to learn are presented in Figure 23.

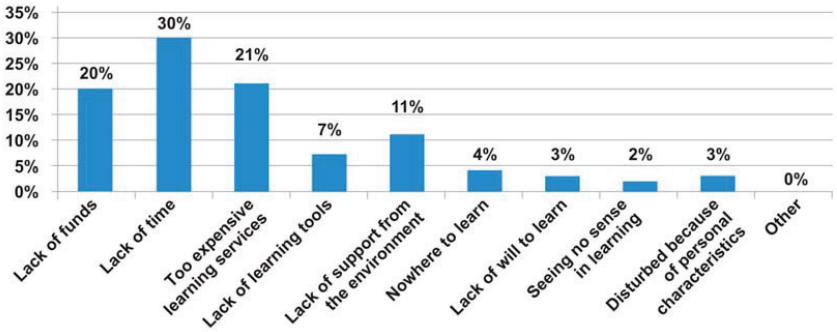



*Fig. 23. Obstacles faced when developing the learning of adults*

30% respondents mentioned lack of time, which is the most common obstacle disturbing the development of the learning. 21% of them noted that learning services are expensive, 20% mentioned lack of funds. 11% respondents lack support from their environment while 7% lack learning tools. 4% respondents stated that there is nowhere to learn, 3% lack the will to learn. Yet another 3% respondents stated that they see no opportunities where to apply knowledge, skills and abilities developed during learning.

To conclude, it can be noted that the lack of time is the biggest obstacle faced when developing the learning of adults, followed by expensive learning services and lack of funds.

The importance of abilities when solving problems is presented in Figure 24.

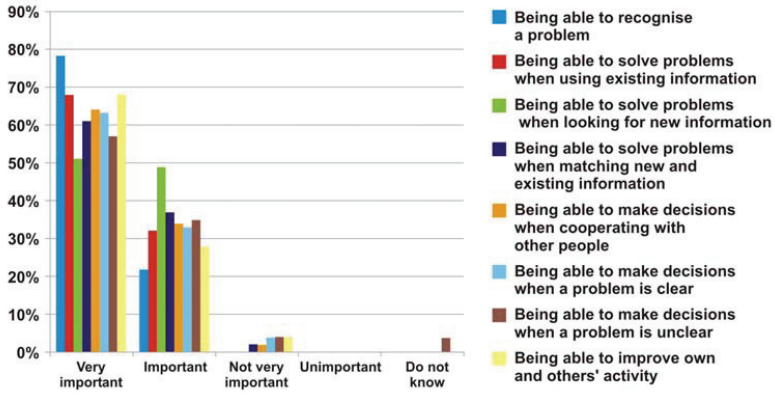



*Fig. 24. The importance of abilities when solving problems*

Solving problems requires an ability to recognise problems. This aspect was highlighted by the majority of research participants (78%). 68% respondents emphasised the ability to solve problems when using existing information and yet another 68% said that it is very important to be able to improve their own and others' activity. 64% respondents noted that it is

very important to be able to make decisions when cooperating with other people. 63% respondents said that it is very important to be able to make decisions when a problem is clear. 61% of them believe that it is very important to be able to solve problems when matching new and existing information. 56% respondents think that it is very important to be able to make decisions when a problem is unclear. Around 50% respondents said that it is very important to be able to solve problems when looking for new information.

48% respondents believe that it is important to be able to solve problems when looking for new information. 36% of them said that it is important to be able to solve problems when matching existing and new information. 34% of the participants find it important to be able to make decisions when a problem is unclear. 33% said that it is important to make decisions when cooperating with other people. Around 32% respondents noted that it is important to be able to make decisions when a problem is clear. 31% of them think that it is important to be able to solve problems when using existing information and 28% believe that it is important to be able to improve their own and others' activity.

Around 4% respondents do not know if it is important to be able to make decisions when a problem is unclear.

To conclude, it can be noted that it is very important for the research participants to be able to recognise problems, to solve problems when using existing information and to be able to improve their own and others' activity.

Research participants believe the ability to solve problems when looking for new information to be important.

Factors stimulating the competence of learning to learn are presented in Figure 25.

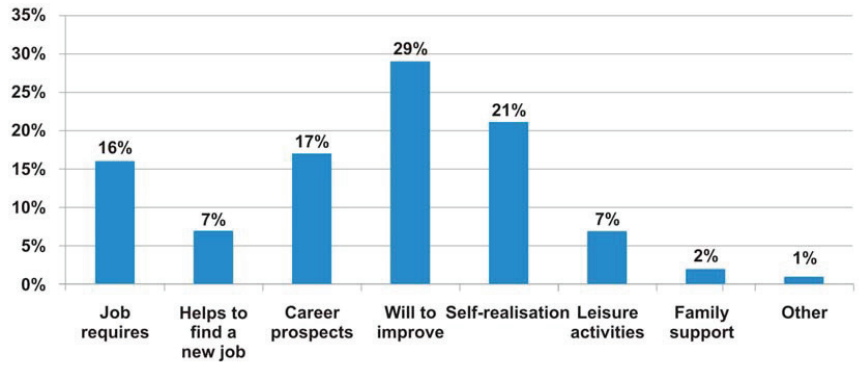



*Fig. 25. Factors stimulating adults' learning*

29% respondents noted that the will to improve stimulates the development of their learning. 21% of them emphasised the pursuit of self-realisation. 17% participants identified

career prospects as one of the stimulating factors. 16% respondents believe that this is what their job requires. 7% research participants think that the development of learning is stimulated by the fact that it might help to find a job. Another 7% of them believe that leisure activities are a stimulating factor as well. 2% respondents said that family support stimulates the development of learning. 1% participants identified other reasons.

The will to improve is identified as the key factor stimulating the development of adults' learning. Research participants also emphasised the pursuit of self-realisation and career prospects.

The influence of the learning to learn competence on individuals' professional life (employability, employment status and quality, etc.).

The influence of the abilities of the learning to learn competence on job searches is presented in Figure 26.

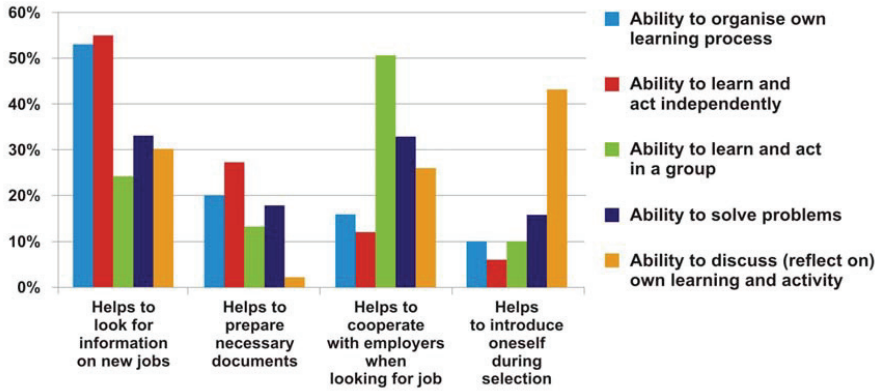



*Fig. 26. The influence of the abilities of the learning to learn competence on job searches.*

Ability to learn and act independently helps to look for new job vacancies. 54% respondents noted that. 53% participants indicated that the ability to organise their own learning process helps them to look for information on job vacancies. 32% respondents emphasised the importance of the problem solving ability when looking for job vacancies. 30% of them think that the ability to discuss, reflect on their own learning and activity helps to look for information on jobs. 24 % respondents emphasise the ability to learn and act in a group. 28% participants believe that their ability to learn and act independently helps them to prepare documents for employment. 20% respondents emphasise the ability to organise their own learning process, 18% - problem solving ability, and 14% - the ability to learn and act in a group. 2% respondents emphasise the importance of the ability to discuss and reflect on their own learning and activity.

Analysing collaboration with employers when looking for jobs, the participants emphasised the following abilities that, they believe, help them to cooperate with employers: around 50% of them noted the importance of the ability to learn and act in a group, 32% - problem solving ability, 26% - the ability to discuss and reflect on their own learning and activity, 17% - the ability to organise their own learning process and around 11% - the ability to learn and act independently.

42% respondents believe that the ability to discuss, reflect on their own learning and activity and 17% of them that the problem solving ability facilitates the process of introducing oneself to the employers at the selection process. The ability to organise their own learning process and the ability to learn and act in a group were emphasised by 10% respondents. 6% of them believe that the ability to learn and act independently is helpful in this process.

The ability to learn and act independently and the ability to organise heir own learning process are the two key abilities that facilitate the process of looking for information on job vacancies. The ability to learn and act independently helps to prepare necessary documentation. The ability to learn and act in a group is identified as the most important in collaboration with employers. The ability to discuss and reflect on their own learning and activity helps to introduce themselves during the selection process.

The influence of the abilities of the competence of learning to learn on job retention is presented in Figure 27.

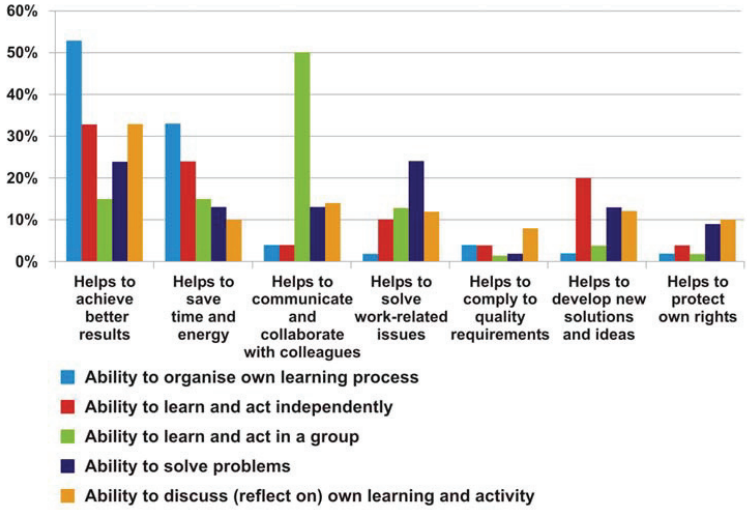



*Fig. 27. The influence of the abilities of the competence of learning to learn on job retention*

As 53% respondents note, the ability to organise their own learning process helps to achieve better results. 32% respondents believe that the ability to organise their own learning process helps to save time and energy. 50% research participants noted that the ability to learn and act in a group helps to communicate and collaborate with colleagues. 23% respondents emphasised the importance of the problem solving ability and claimed that it helps to solve work-related issues. 20% respondents noted that the ability to learn and act independently helps to develop new solutions and ideas. 10% respondents said that the ability to discuss and reflect on their own learning and activity helps to protect their own rights while 9% emphasised the problem solving ability.

To conclude, it should be noted that the ability to organise their own learning process helps to achieve better results and helps to save time and energy. The ability to learn and act in a group helps to communicate and collaborate with colleagues. Problem solving ability helps to solve work related issues. The ability to discuss and reflect on their own learning and activity helps to comply with quality requirements. The ability to learn and act independently helps to develop new solutions and ideas. The ability to discuss and reflect on their own learning and activity, and problem solving ability help them to protect rights.

The influence of the learning to learn competence on participation in social activity is presented in Figure 28.

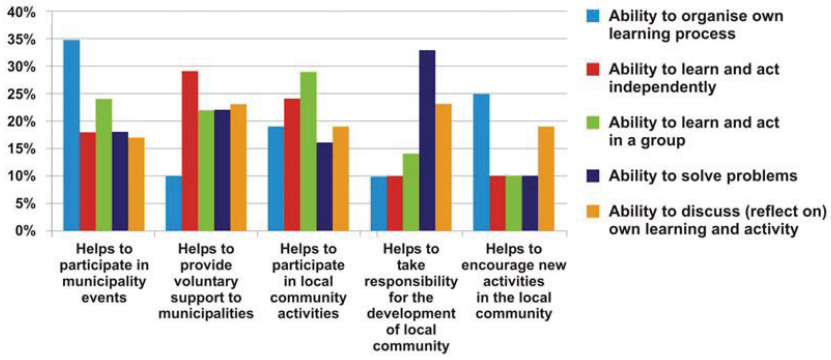



*Fig. 28. The influence of the abilities of the learning to learn competence on participation in social activity*

35% respondents noted that the ability to organise their own learning process facilitates participation in municipality events. 28% of them indicated that the ability to learn and act independently helps to provide voluntary support to municipalities. As 29% participants noted, the ability to learn and act in a group helps to participate in local community activities. 33%

respondents noted that the problem solving ability helps them to take responsibility for the development of their local community.

25% participants claim that the ability to organise their own learning process helps to encourage new activities in the local community.

To conclude, it can be noted that the ability to organise their own learning process facilitates participation in municipality events. The ability to learn and act independently helps to provide voluntary support to municipalities. The ability to learn and act in a group helps to participate local community activities. Problem solving ability helps them to take responsibility for the development of their local community. The ability to organise one's learning process helps to encourage new activities in the local community.

The abilities of the learning to learn competence are important to adult learners' participation in social civil activities.

### 3.2. Adult Learning to Learn Needs, Opportunities and Influence on Personal, Professional and Social Activity

The research was conducted in Lithuania in order to identify adult learning to learn needs, opportunities and influence on their personal, professional and social activity.

2575 respondents (907 males and 1668 females) from Lithuania participated in this quantitative research. The respondents' distribution in Lithuania is presented in Figure 29. The respondents' distribution by age is provided in Figure 30 (see Appendix).

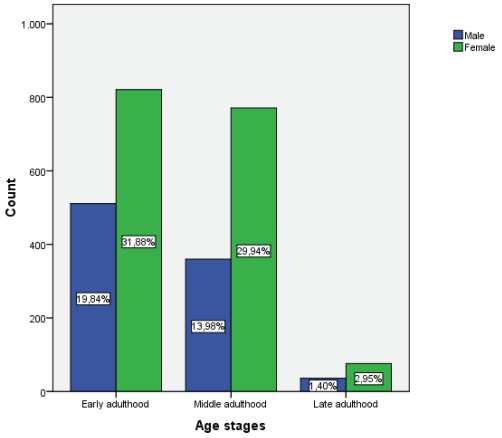



*Fig. 29. Male and female distribution by age groups*

More women than men from each age group participated in the research. The distribution of men and women by age groups is presented in Figure 31, where it is seen that in the early adulthood group there are 31,9 % women and 19,8 % men; in the middle adulthood group 29,94% women and about 14 % men and in the late adulthood group about 3% women and 1,4% men participated in this research.

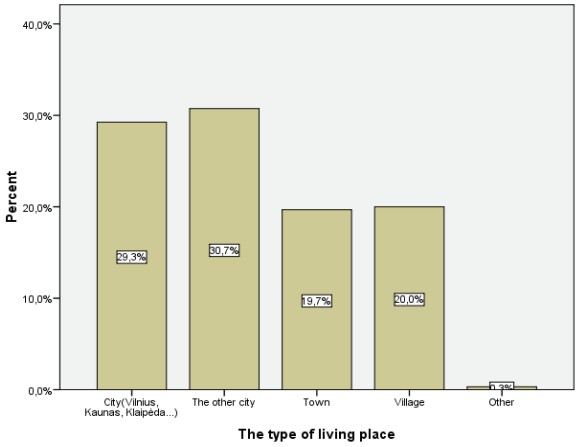



*Fig. 30. Place of residence*

About 60% respondents, according their place of the residence live in the city. The rest 40% are from towns and villages.

Respondents believe key competences to be very important in the following spheres: personal development, professional activity, completing work tasks, career pursuit and fulfilling civil obligations. When compared to other key competences, learning to learn follows communication in the mother tongue and digital competence. This is how research participants' answers to the question about how important the key competences are for work, career pursuit and social and personal activities distributed. 34% respondents stated that they are very important, 46% - important; the remaining research participants thought that learning to learn is not very important - 15% and 5% respondents said that it is unimportant.

In order to find out how adults develop key competences, respondents were asked how often they participate in seminars, lectures or group tasks; learn independently; use computer software and internet; use TV and radio; analyse literature; learn through daily activities.

It has been noted that adults often learn through daily activity (46%), use computer programs and internet (33%), as well as learn independently (31%). The participants highlighted the importance of the will to help others (~50%), daily work-related needs (~50%)

and support from society and friends (~ 50%). The research has also highlighted the interesting fact that 54% of the respondents never use distant learning methods.

The development of key competences is stimulated by various factors. The most important of them according to the research participants is family support (around 51%). Other important factors are their will to improve (~ 49%), will to help and be useful to one's family (~48%), and the pursuit of self-realisation (~46%).

According to the research participants, the most important obstacles hindering the development of KCs are expensive learning services (~61%), lack of funds (58%), lack of time (~35%), and lack of support from the workplace (~31%).

### 3.2.1. Research participants' opinion on learning to learn

In the theoretical part of the dissertation, learning to learn has been defined as a complex construct. Learning to learn involves planning and organising the process of learning, solving learning-related problems, independent learning, learning in a group and reflecting on the learning experience. When defining learning to learn, it is also important to draw attention to the learner's values, personal features, knowledge, skills and experience.

The research has revealed that, as one of key competences, learning to learn is important in personal, professional, social and civil adult activity.

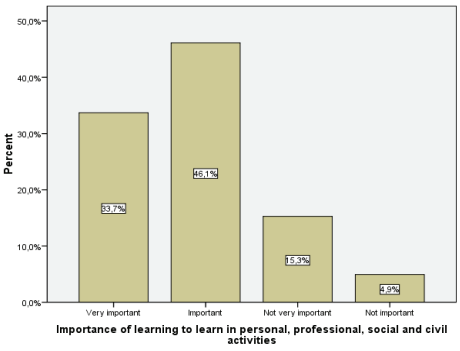



*Fig. 31. Importance of learning to learn for adults*

The results indicate that the majority of respondents (46.1%) agreed that learning to learn is important in their personal, professional, social and civil activity. 33.7% respondents believed learning to learn to be very important in their personal, professional and social life. 15.3% thought that learning to learn is not very important in their life and yet another 4.9% said that it is unimportant to them.

After generalising all research participants' responses, the conclusion could be drawn that the majority of adults (~80%) understood the importance of learning to learn, since the prevailing answers were that learning to learn is very important and/or important in personal, professional and social life.

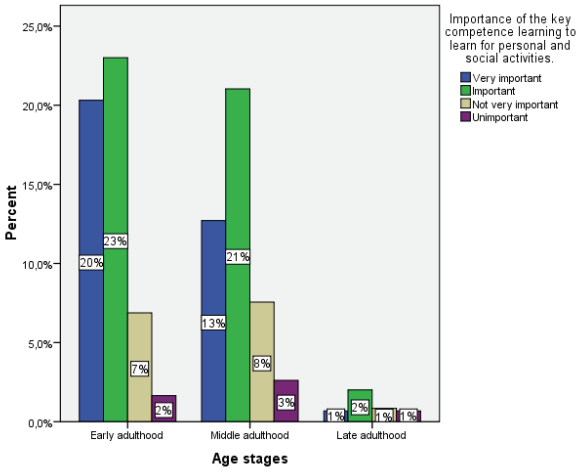



*Fig. 32. Importance of learning to learn for adults in personal, professional and social activity at different age stages*

The analysis of results by age groups has revealed that in early adulthood, 23% respondents find learning to learn very important, while 21% respondents in middle adulthood and 2% in late adulthood identified learning to learn as very important in their personal, professional and social activity.

20% respondents in early adulthood, 13% in middle adulthood and only 1% in late adulthood believed learning to learn to be an important key competence in their personal, professional and social activity.

7% respondents in early adulthood, 8% in middle and 1% in late adulthood said that learning to learn is not very important, while 2% young adults, 3% middle-aged adults and 1% elderly adults noted that learning to learn is unimportant.

To generalise the results it can be noted that the importance of learning to learn is most obvious to adults in early adulthood when compared to middle and late adulthood. Middle-aged and older adults claimed that learning to learn is not very important. However, certain trends of learning to learn were noted; thus it could be said that learning to learn remains somehow important even in late adulthood.

The analysis of learning to learn has revealed that the research participants agree that it is a complex construct, involving such abilities as being able to use one's knowledge (~67 %), to use existing skills (~66%), to use one's experience (~65%), to learn independently (~ 58%), to learn through collaboration (~ 57%), to use personal features (~ 57%), to plan and organise the process of learning (~ 54%), to use one's values (~ 54%), to discuss learning experience (~41%), and to solve learning-related problems (~41%).

The following abilities facilitate respondents' learning: ability to act independently (~58%), ability to organise one's process of learning and activity (~57%), ability to act when solving problems (56%), ability to act in a group (~52%), and ability to discuss one's learning and activity (46%). As the respondents' answers indicate, the most important abilities in learning to learn are the ability to act independently, the ability to organise one's process of learning and activity and the ability to solve problems. All these abilities help adults to learn various things. These results support the model of the abilities of the learning to learn competence as presented in the theoretical part of the dissertation, i.e. the importance of the entirety of abilities in the learning to learn process, as all abilities are more or less important to the respondents

Further, adult opinions on learning to learn are presented.

More female than male respondents (56.2% females and 44.4% males) agreed with the statement that learning to learn is planning and organising the process of learning. 26.7% males and 25.2% females said that they more agree than disagree with the statement, while 21.1% male and 14.9% female participants said that they do not know how to answer this question. Finally, 5.6% male and 1.7% female participants indicated that they more disagree than agree with the statement.

Statistical data has proved statistical significance: Somers' d = -0,144. Approx. Sig.0.031 < 0.05

($p<0.05$ indicates statistical significance).

Thus, clearly, more female participants agreed with the statement that learning to learn is planning and organising the process of learning.

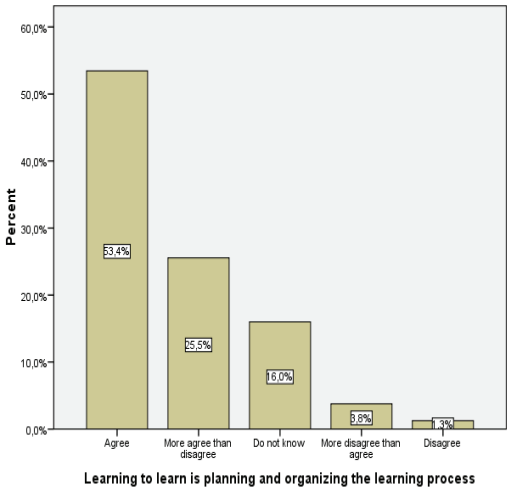



*Fig. 33. Learning to learn is planning and organizing the learning process*

By agreeing with the provided statement, 53.4% respondents defined learning to learn as the process of planning and organisation. 25.5% respondents more agreed than disagreed that learning to learn involves planning and organisation. 16% research participants did not know how to answer this question, 3.8% adults more disagreed than agreed with the statement and 1.3% participants disagreed that learning to learn is planning and organisation. To generalise research participants' opinions it should be noted that around 79% research participants identified learning to learn as the process of planning and organisation.

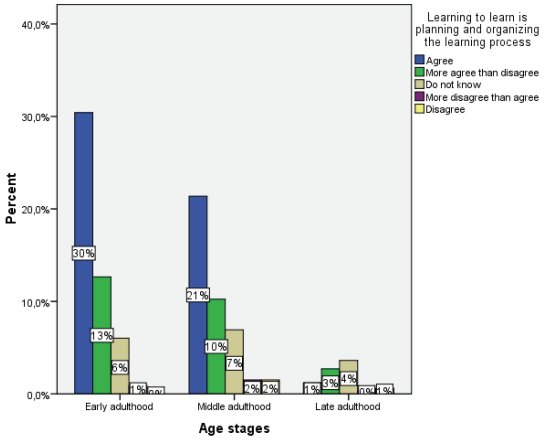



*Fig. 34. Learning to learn is planning and organizing the learning process*

Young and middle-aged adults significantly expressed their opinion on learning to learn. 30% adults in EA* (early adulthood group), 21% participants in MA* (middle adulthood group) and 1% adults in LA* (late adulthood group) agreed that learning to learn is planning and organisation.

6% EA respondents, 7% ME adults and 4% LA participants said that they have no knowledge on learning to learn as the process of planning and organisation. A small group of respondents (1% LA and 2% LA adults) more disagreed than agreed with the statement.

Thus research participants' perception of learning to learn as the process of planning and organisation is clear in EA and MA age groups. It has also been noted that LA respondents find it harder to make a decision, as their answers suggest that they do not know if learning to learn is the process of planning and organisation.

**Learning to learn is using one's knowledge.**

66.7% respondents agreed, 25.2% more agreed than disagreed, 6.4% did not know, 1.4% more disagreed than agreed and 0.2% research respondents disagreed with the statement that **learning to learn is using one's knowledge**. Since 92% respondents approved this statement, the conclusion could be drawn that learning to learn is using one's knowledge. The results are presented in Figure 35.

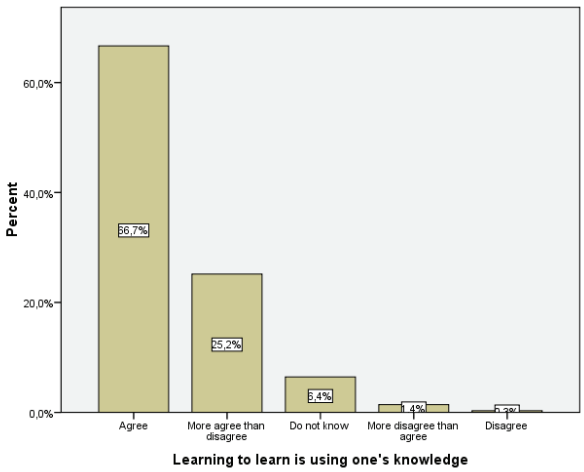



*Fig. 35. Learning to learn is using one's knowledge*

Somers' d = - 0.146, p=0.019 < 0.05 indicate statistically significant differences between answers provided by female and male respondents. 58.2% males and 71.0% females agreed with this statement, which indicates that the greater number of female participants agreed with this statement. 27.5% male and 24.1% female participants said that they more agree than

disagree with the statement while 13.2% males and 3.3% females did not know how to answer this question.

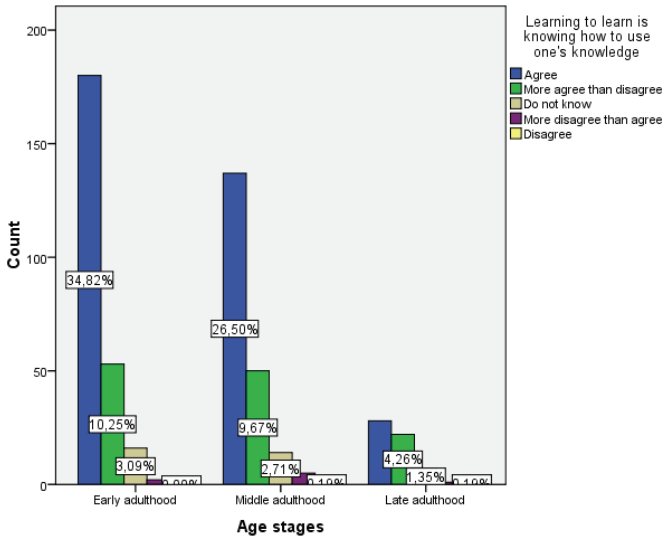



*Fig. 36. Learning to learn is using one's knowledge*

Female and male participants' opinions did not greatly differ when talking about the statement that **learning to learn is solving problems related to learning** (statistical significance not found, Somers' d = -0,082, Approx. Sig. 0,215). 34.8% male and 45.2% female participants agreed with the statement, 31.5% males and 24.3% females more agreed than disagreed, 23.6% male and 20.1% female participants did not know how to answer it, 7.9% males and 5,4% females more disagreed than agreed with this statement and, finally 2.2% males and 5.0% disagreed with this statement.

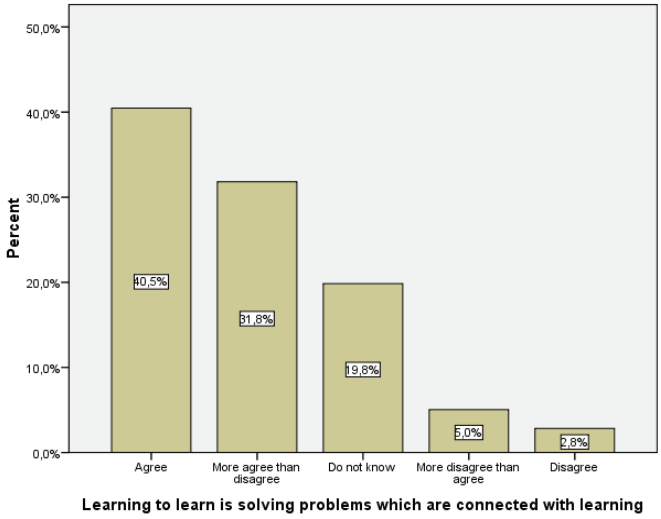



*Fig. 37. Learning to learn is solving problems, connected with learning*

To generalise research results, it should be noted that 40.5% research participants agreed that **learning to learn is the process of solving learning-related problems**. 31.8% adults more agreed than disagreed with the statement. It is also important to note that 19.8% adults did not know, 5% more disagreed than agreed and 2.8% respondents disagreed that learning to learn is solving learning-related problems. Thus it is evident that, according to the adult research participants, learning to learn is solving learning-related problems.

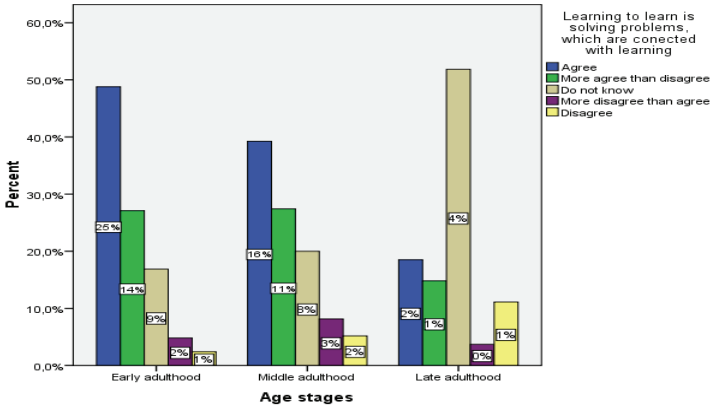



*Fig. 38. Learning to learn is solving problems related to learning*

25% EA respondents, 16% MA adults and 2% LA participants believe that learning to learn is solving learning-related problems. Then 14% young adults, 11% middle-aged adults

and 1% older adults more agree than disagree that learning to learn is solving learning-related problems. The results indicate that more EA respondents than MA respondents think that learning to learn is solving learning-related problems. A considerably smaller number of LA respondents agree that learning to learn is solving learning-related problems. There were a number of people in all three groups (EA – 9 %, MA – 8%, and LA – 4%) who did not know if learning to learn is solving learning-related problems.

2% EA respondents and 3% MA participants more disagreed than agreed with the statement.

1% EA, 2% Ma and 1% LA respondents said that they disagree with the statement. This indicates that a similar number of people in all three groups do not agree that learning to learn is solving problems related to learning to learn.

Thus it could be concluded that, in early and middle adulthood, adults perceived learning to learn as solving learning-related problems. A considerably smaller amount of people in LA agree that learning to learn is being able to solve problems.

Male and female participants' opinions differed on the statement that **learning to learn is discussing one's learning experience** (Somers' d = -0.203, Approx. Sig. 0,003 < 0.05). 44.8% female and 30.7% male participants agreed to the statement, 30.7% females and 35.1% males more agreed than disagreed with the statement, 30.7% male and 13.0% female participants did not know how to answer this question, 5.7% males and 3.8% females more disagreed than agreed with the statement and, finally, 2.3% males and 3.3% females disagreed with the statement (Somers' d = -0.155).

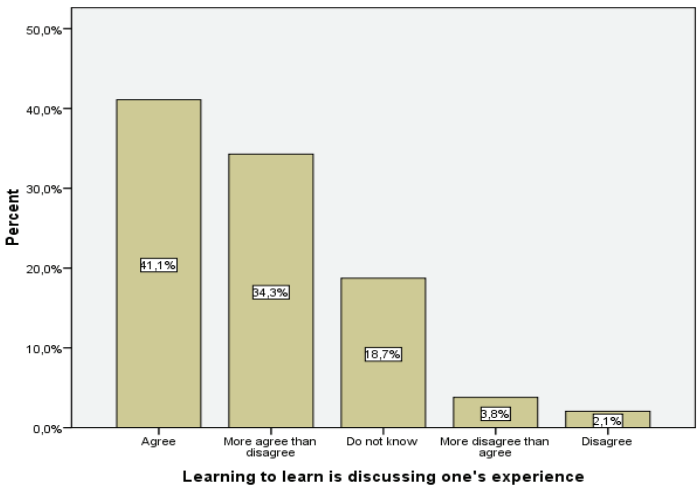



*Fig. 39. Learning to learn is discussing one's learning experience*

41.1% respondents agreed, 34.3% of them more agreed than disagreed, 18.7% did not know, 3.8% more disagreed than agreed and 2.1% participants disagreed that learning to learn is discussing one's experience. Thus it is important to note that the majority of respondents (75.4%) identified learning to learn as the process of discussing one's experience.

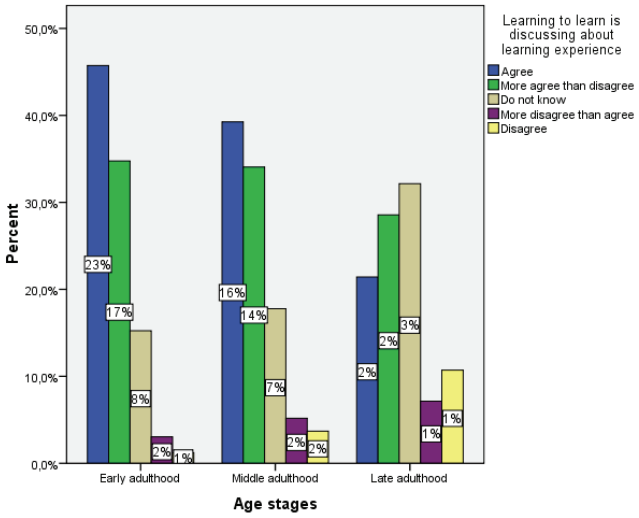



*Fig. 40. Learning to learn is discussing one's learning experience*

Discussions on learning to learn as the process of discussing one's experience have revealed that 22.66% EA, 15.43% MA and 2.73% LA respondents agree with this statement.

15.43% EA, 14.65% MA and 3.12% LA research participants more agreed than disagreed with the statement.

8.20% EA, 6.84% MA and 4.30% LA adults did not know how to answer this question. Just a small number of the research participants more disagreed than agreed with the statement that learning to learn is discussing one's experience.

The conclusion could be drawn that, when compared to EA and MA age groups, just a small number of LA respondents believe that learning to learn is discussing one's experience.

**Learning to learn is learning independently**. 47.2% male and 60.6% female participants agree with this statement, which indicates that male research participants' opinion statistically significantly differs from female participants' opinion. 31.5% male and 29.0% female participants more agree than disagree with the statement; 16.9% males and 5.0% females said that they do not know how to answer this question; 4.5% males and 2.1.% females provided the answer that they more disagree than agree with the statement and, finally, 0% males and 3.3% said that they disagree with the statement.

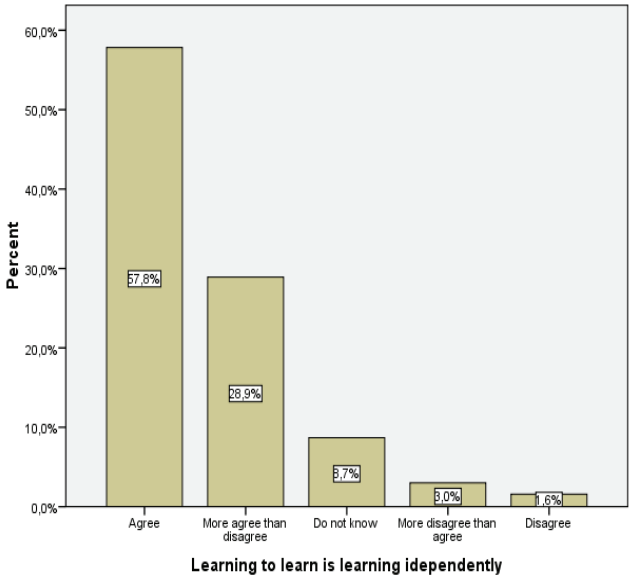



*Fig. 41. Learning to learn is learning independently*

57.8% respondents agreed, 28.9% of them more agreed than disagreed, 8.7% adults did not know, 3% participants more disagreed than agreed and 1.6% of them disagreed that learning to learn is the process of learning independently**.** However, the results show that the majority of respondents agree that learning to learn is learning independently.

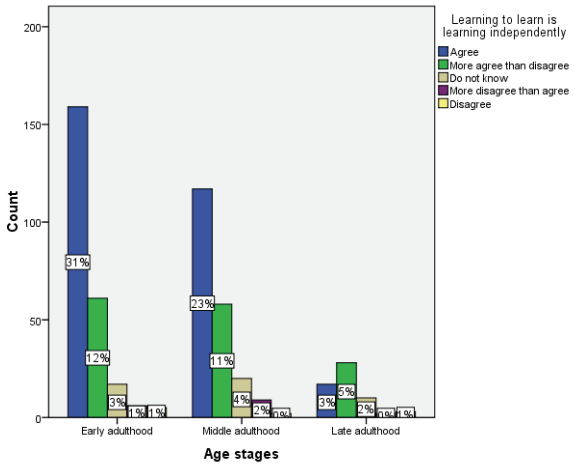



*Fig. 42. Learning to learn is learning independently*

Analysing the statement that learning to learn is learning independently, 30.93% EA adults, 22.76% MA and 3.31% LA participants agreed with the statement. 11.87% EA, 11.28% MA and 5.45% LA adult respondents more agreed than disagreed that learning to learn is

learning independently. The results have shown that learning to learn is learning independently. When compared to other age groups, LA respondents were less inclined to agree that learning to learn is learning independently.

No statistically significant differences were noted between male and female participants' opinions on the statement that **learning to learn is learning and acting with others (collaboration)**. Somers' d = -0.117, p=0.075.

50.6% male and 60.1% female participants agree with the statement. 28.1% males and 28.1% females more agree than disagree with the statement.

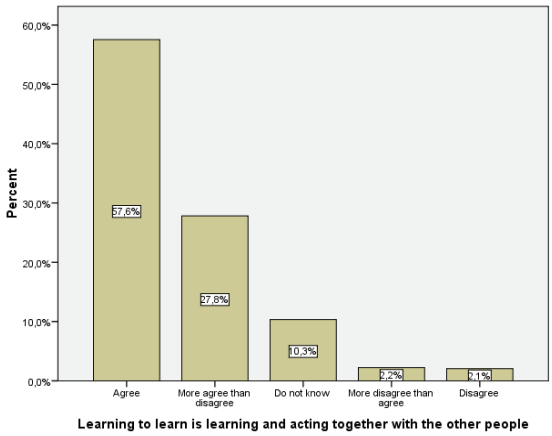



*Fig. 43. Learning to learn – learning to learn through collaboration*

Learning to learn is collaboration with other people: 56% EA participants, 30% MA adults and 8% LA respondents agreed with this statement. It has been noted that more young respondents understand learning to learn as collaboration with other people. Only 8% older adults agree that learning to learn is being able to learn with others through collaboration.

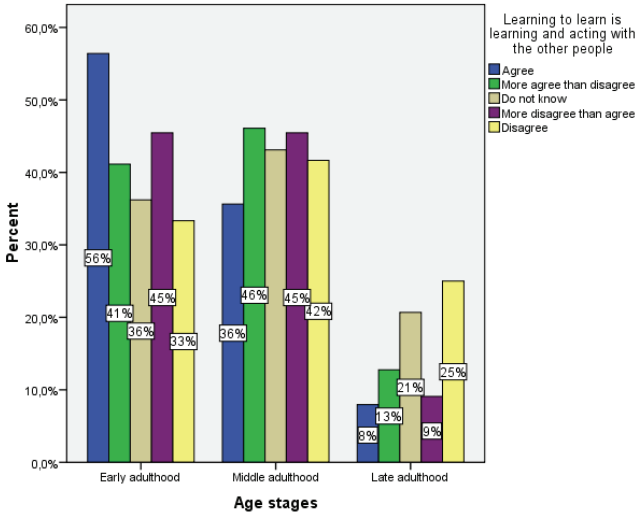



*Fig. 44. Learning to learn is learning and acting with other people.*

41% EA respondents, 46% MA and 13% LA participants indicated that they more agree than disagree with the statement that learning to learn is acting together with other people. 36% EA, 43% MA, 21% LA respondents did not know if learning to learn is being able to learn through collaboration. A quite significant number of the research participants had doubts about learning to learn as learning through collaboration with others. 45% EA, 45% MA, 9% LA respondents said that they more disagree than agree with this statement. Besides, another 33% EA, 42% MA, 25% LA respondents indicated that they disagree with the statement that learning to learn is learning through collaboration.

**Learning to learn is knowing how to use one's knowledge.**

Somers' d = - 0.146; p=0.019 < 0.05 indicate statistically significant differences between male and female respondents' answers. 58.2% males and 71.0% females said that they agree to the statement, which indicates that a larger number of female participants agreed with the statement. 27.5% males and 24.1% females more agree than disagree with the statement, while 13.2% males and 3.3% females did not know how to answer this question.

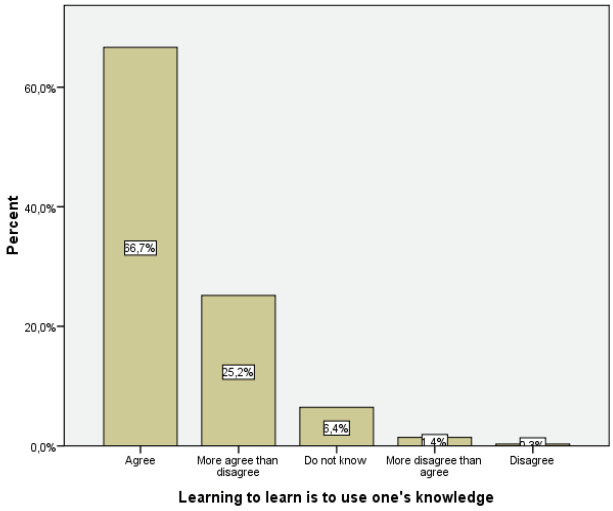



*Fig. 45. Learning to learn is to use ones's knowledge*

56.7% respondents agreed with the statement that learning to learn is using one's knowledge while another 25.2% participants more agreed than disagreed with the statement. 5.4% respondents did not know and 1.4% of them more disagreed than agreed that learning to learn is using one's knowledge.

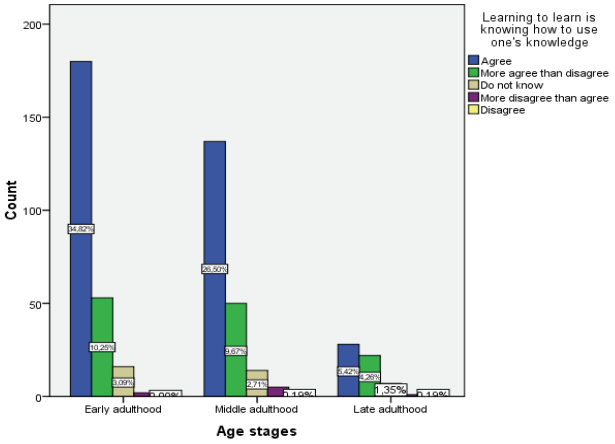



*Fig. 46. Learning to learn is knowing how to use one's knowledge*

Discussions on learning to learn as knowing how to use one's knowledge have revealed that 34.82% EA, 26.50% MA and 5.42% LA respondents agree with this statement. Then,

another 10.25% EA, 9.67% MA and 4.26% LA participants more agreed than disagreed with the statement that learning to learn is knowing how to use one's knowledge.

3.09% EA, 2.71% MA and 1.35% LA respondents did not know how to answer this question. As the results indicate, the prevailing opinion in all age groups is that learning to learn is the process of knowing how to use one's knowledge; however, a smaller percentage of LA participants agree with this statement. More adults in the LA group did not know if learning to learn is related to knowing how to use one's knowledge.

The analysis of respondents' responses on the statement that **learning to learn is using one's experience** has revealed statistical significance, i.e. Somers' d = -.155; p=0.014 < 0.05.

54.4% male and 68.5% female participants agreed with this statement. 28.9% males and 24.1% females said that they more agree than disagree with the statement and, finally, 15.6% male and 5.0% female participants did not know how to answer this question.

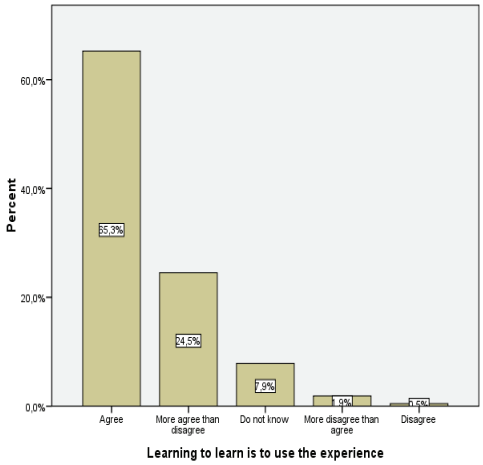



*Fig. 47. Learning to learn is using one's experience*

35.3% research participants agreed that learning to learn is using one's experience. 24.5% of them more agreed than disagreed with the statement; 7.9% adults did not know and 1.9% more disagreed than agreed that learning to learn is being able to use one's experience.

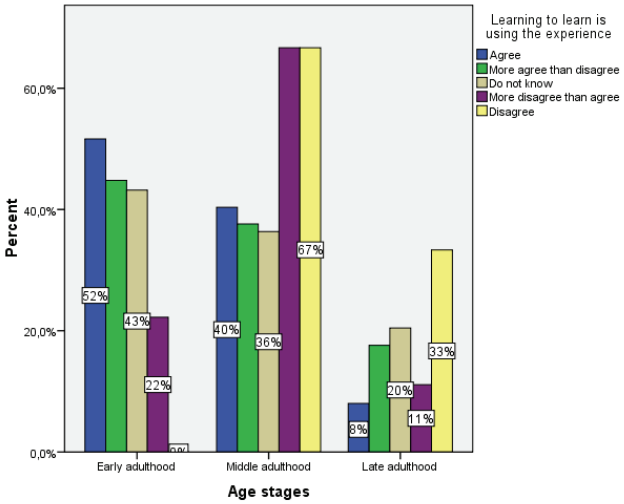



*Fig. 48. Learning to learn – using one's experience*

Adult responses were distributed by age groups in the following way: 51.6% EA, 40.4% MA and 8% LA respondents agreed to the statement.

MA respondents had a slightly different opinion, where 66.7% adults more disagreed than agreed that learning to learn is being able to use one's experience. The results also indicate that fewer respondents from the LA group agreed that learning to learn is using one's experience. 33.3% adults disagreed that learning to learn is using one's experience. In middle adulthood, 66.7% adults disagreed that learning to learn is being able to use one's experience. Thus the results have revealed significant differences in MA and LA group responses where respondents more disagreed than agreed that learning to learn is using one's experience**.**

Learning to learn is **knowing how to use skills.** Somers' d =-0.207; p =0.001 < 0.05.

Female and male respondents' answer distribution is statistically significant. 53.3% male and 72.4% female participants agreed to the statement.

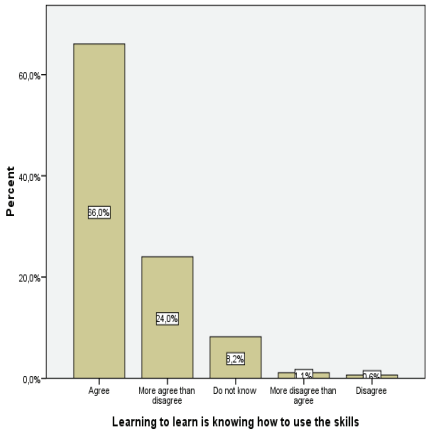



*Fig. 49. Learning to learn is knowing how to use the skills*

Discussions on learning to learn as the process of using one's skills have revealed that the majority of respondents (66%) agree to this statement. 24% more agreed than disagreed, 8.2% respondents did not know and 1.1% more disagreed than agreed that learning to learn is the process of knowing how to use one's skills.

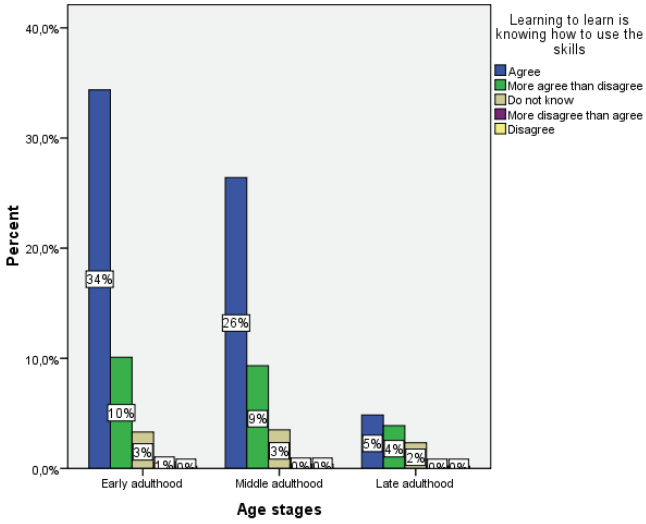



*Fig. 50. Learning to learn – knowing how to use one's skills*

34.37% EA, 26.41% MA, and 4.85% LA respondents agreed the statement that learning to learn is the process of knowing how to use one's skills. 10.10% adults in the EA group, 9.32% of them in the MA group and 3.88% respondents in the LA age group more agreed than disagreed with the statement. Thus similar trends were noted in EA and MA age groups and

only adults from the LA age group were less keen on agreeing that learning to learn is the process of knowing how to use one's skills. A small percentage of respondents indicated that they more disagree than agree or that they disagree with the statement that learning to learn is being able to use one's skills.

Learning to learn is knowing **how to use one's values**

Statistical data: Somers' d = -0.238; Approx. Sig p =0.000 < 0.05. Statistically significant differences were noted in male and female respondents' answers on the statement that learning to learn is knowing how to use one's values.

More female (62.2%) than male (40.9%) participants agreed with the statement that learning to learn is knowing how to use one's values. 26.1% females and 31.8% males said that they more agree than disagree with the statement. Finally, 25.0% males and 8.0% females said that they do not know how to answer this question.

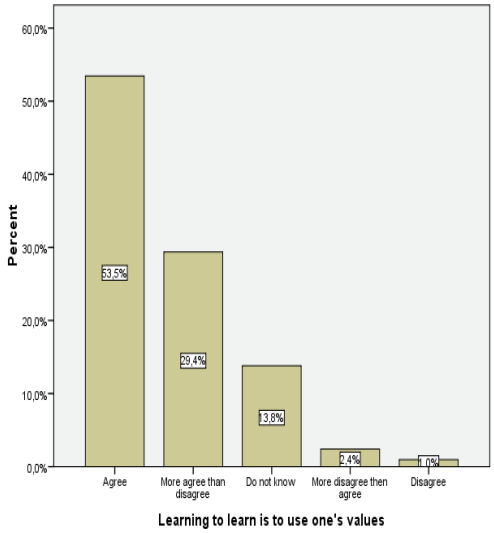



*Fig.51. Learning to learn is using one's values*

The research results have shown that 53.5% adults agreed, 29.4% of them more agreed than disagreed,13.8% did not know, 2.4% more disagreed than agreed and 1% disagreed that learning to learn is the process of using one's values. Thus a conclusion could be drawn that a significant number of the research participants either agree or more agree than disagree to the statement that values are important in the process of learning to learn.

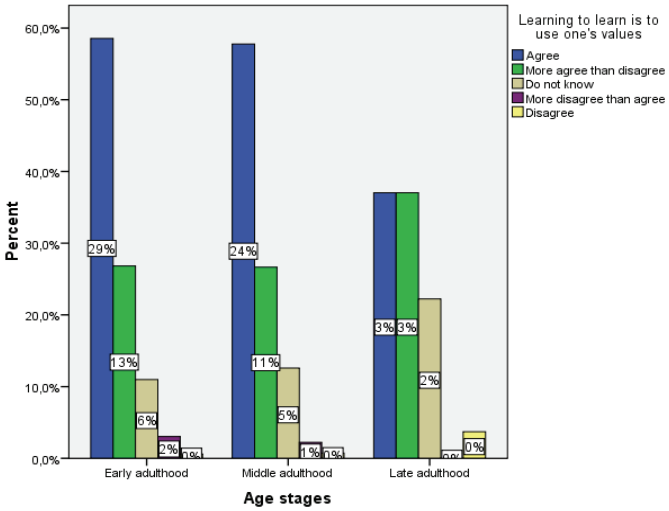



*Fig. 52. Learning to learn is using one's values*

Respondents' answers in different age groups distributed as follows: 29% EA participants, 24% MA and 3% LA respondents agreed that learning to learn is using one's values. 13% EA, 11% MA and 3% LA respondents more agreed than disagreed with this statement. Thus the prevailing answers prove the importance of values both in EA and MA age groups. In late adulthood, equal numbers of participants agreed or more agreed than disagreed that learning to learn is using one's values. Therefore the conclusion could be drawn that values are important in the LL context in all age groups.

Research participants indicated that learning to learn is very helpful when pursuing professional career (~48%), keeping one's job (~44%), looking for jobs (~42%), and participating in social and civil activity (~35%).

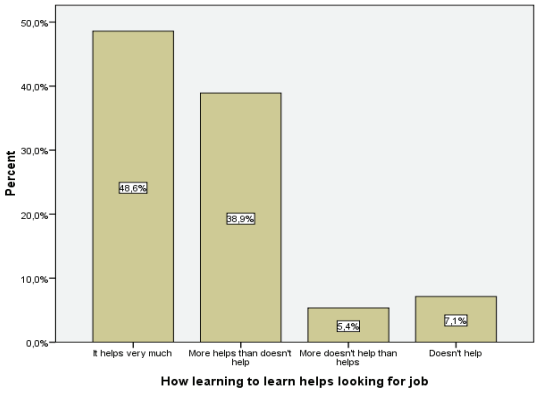



*Fig. 53. Learning to learn helps one look for a job*

The results have emphasised the importance of learning to learn when looking for a job. 48.8% adults claimed that learning to learn is very helpful when looking for a job. 38.9% respondents indicated that it is more helpful than unhelpful when looking for a job. Another 5.4% believed learning to learn to be more unhelpful than helpful. Finally, 7.1% surveyed adults did not know if learning to learn helps to look for a job.

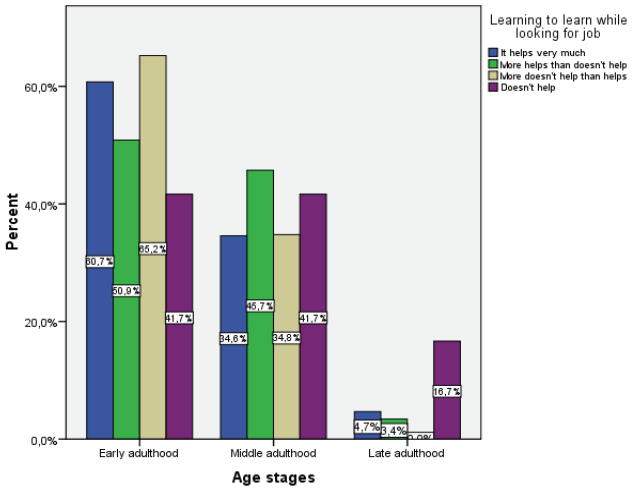



*Fig. 54. Learning to learn while looking for a job*

The comparison of results in different age groups has revealed that 60.7% EA adults, 34.6% MA and 4.7% LA respondents believe learning to learn to be very helpful when looking for a job.

50.9% EA, 45.7% MA and only 3.4% LA respondents indicated that learning to learn is more helpful than unhelpful.

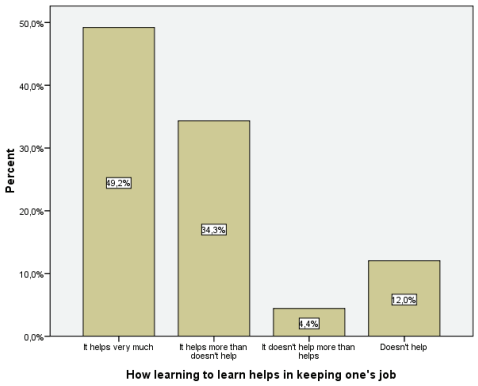
Another 65.2% EA respondents and 34.8% MA respondents said that learning to learn is more unhelpful than helpful in this situation.

41.7% EA and MA respondents and another 16.7% LA respondents claimed that learning to learn does not help when looking for a job. Thus it is clear that a greater number of older adults (LA age group) believe that learning to learn is unhelpful when looking for a job.

Upon generalisation of the research results, it cannot be claimed that learning to learn is undoubtedly important when looking for a job. The doubts are raised by the respondents' responses that learning to learn is more unhelpful than helpful to them when looking for a job.

**Learning to learn** is helpful to **those who are looking for a job** as it helps to look for new job vacancies (~81%), to prepare documents required for employment (~71%), to cooperate with employers and their representatives when looking for a job (~66%), and to introduce oneself to

employers during the selection process (~63%).



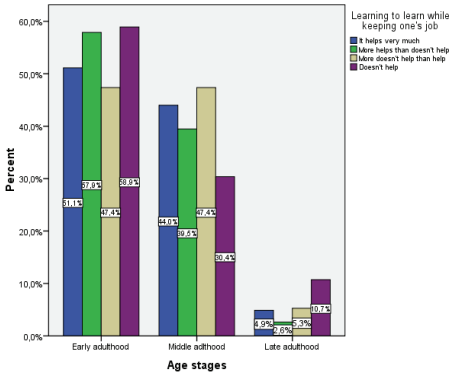
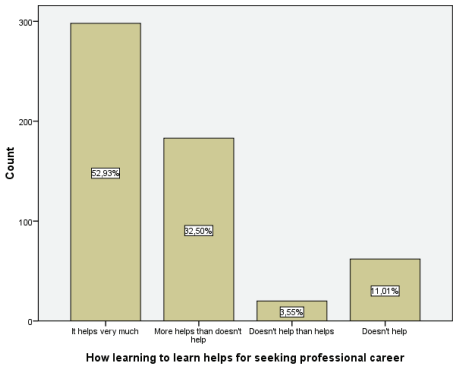




*Fig. 55. Learning to learn helps in keeping one's job* *Fig.56. Learning to learn while keeping one's job*

Learning to learn is helpful for **keeping one's job** as it helps to solve work related issues and problems (~73%), to achieve better results throughout the work day (~69%), to improve collaboration and communication with colleagues (~62%), to develop new solutions and ideas in the workplace (~60%), to save time and energy (~55%), to comply to quality requirements (~51%) and to protect one's rights (~50%).



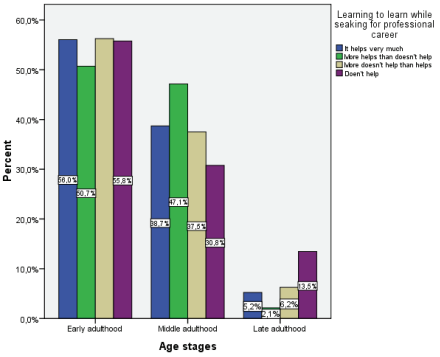
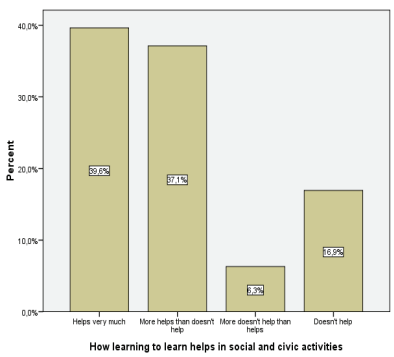




*Fig. 57. Learning to learn helps for seeking professional career* *Fig. 58. When pursuing professional career*

When pursuing a professional career, the learning to learn competence helps to look for information on career opportunities (~70%), to better present one's strengths to employers (~67%), to plan one's career independently (~66%), to assess possibilities to be promoted

(~53%), to communicate with HR specialists, focusing on career-related questions (~52%), and to start and develop an independent business (~42%).



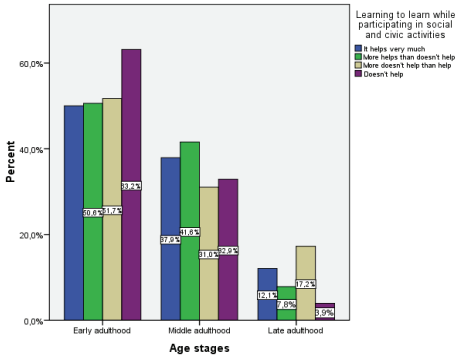




*Fig. 59. Learning to learn facilitates participation in social activity Fig. 60. Learning to learn while participating in social and civic activities*

Learning to learn facilitates participation in social activity, as this competence helps to find activities in the local community (~66%), to develop and maintain relations with the local community (~66%), to find activities for oneself in local communities (~66%), to participate in events and initiatives organised by municipalities and get involved in their organisation and implementation (~52%), to encourage and stimulate new local community activities (~37%), to provide voluntary support to municipalities (~37%), and to take responsibility for the development of local communities (~37%).

**Ways of developing the competence of learning to learn**

When assessing the statements provided, it can be seen that the respondents agreed that it is important to be responsible for one's learning (~60%), to determine one's learning needs (~59%), and to assess one's learning (~56%). It is also important to have a person who could help one to learn and could provide knowledge (~54%), to learn independently, demonstrating a high level of understanding (~53%), to be able to develop new ideas, take on long-term responsibilities (~49%), and to help others and give knowledge (~38%).

Adults face various problems in different scenarios. The research participants indicated that problem solving abilities help them to study various subjects. ~59% respondents agreed that they are able to make decisions when a problem is clear. ~54% adults are able to solve problems when using existing information. ~52% respondents are able to recognise problems; ~51% of them are able to solve problems when looking for new information and ~50% respondents can use others' support to solve problems. ~50% adult respondents are able to

solve problems by matching new and existing information; ~43% of them can do it by improving their own and others' activities and, finally, ~32% can make decisions when a problem is unclear.

Learning to learn involves different aspects that respondents would be willing to develop and improve if they had an opportunity to do that. Respondents' answers were distributed in the following way: ~57% would like to use knowledge in practice, ~53% would like to develop planning and organising abilities, ~53% would like to use personal features, ~47% would like to develop and improve communication and collaboration, ~42% - independent learning, and ~38% - solving learning related problems.

*Table 6. Ways of developing the learning to learn competence*

| Statement | Somer's d | Approx. Sig. p | Early adulthood | Middle adulthood | Late adulthood | Note Most frequent answer |
|---|---|---|---|---|---|---|
| It is important to have a person who gives knowledge, helps learning | 0.100 | 0.054 | 60.1% | 46.4% | 48.1% | Agreed to this statement, no statistically significant differences |
| It is important for me to help others to learn and give them knowledge | 0.113 | 0.040 | 42.0% | 31.6% | 33.3% | Agreed to this statement |
| It is important to determine one's learning needs | 0.161 | 0.002 | 67.1% | 51.1% | 44.4% | Agreed to this statement |
| It is important to be responsible for one's learning | 0.136 | 0.007 | 65.0% | 54.9% | 44.4% | Agreed to this statement |
| It is important to assess one's learning | 0.109 | 0.038 | 6.8% | 7.5% | 26.9% | Did not know |
| It is important to be able to learn independently, demonstrating high level of understanding | 0.202 | 0.000 | 6.7% | 11.3% | 20.0% | Did not know |
| It is important to demonstrate the ability to develop new ideas and take on long-term responsibilities | 0.277 | 0.000 | 63.7% | 37.3% | 30.8% | Agreed to this statement |

The research highlighted the following trends of learning to learn scenarios: importance of learning needs identification (at different age groups); participation of a person who could

help learning and provide knowledge; helping others to learn and providing them knowledge; taking responsibility for one's learning; being able to learn independently, demonstrating a high level of understanding; being able to develop new ideas, taking on long-term responsibilities.

The research results supported the idea that adults learn purposefully, following increasingly complex scenarios.

The following section presents research participants' opinion on development opportunities for learning to learn, which is also important for the development and improvement of the learning to learn scenarios (taking into consideration different age periods).

### 3.2.2. Different age adults' approach to the development of learning to learn

Adults would agree to develop their learning to learn abilities to. ~56% respondents agree to develop their problem solving ability, ~52% - the ability to organise own process of learning, ~50% - the ability to learn independently, ~47% - the ability to learn in a group and, finally, ~44% respondents would like to discuss their own learning. Research participants expressed similar opinions on the development of the learning to learn abilities. Thus the conclusion could be drawn that all learning to learn abilities are important in the context of lifelong learning. These results generalise all research groups' approach to the development of learning to learn abilities.

After assessing the statements provided, research participants agreed that it is important to be responsible for one's learning (~60%), to determine one's learning needs (~59%), to assess one's learning (~56%), to have a person who could help to learn and provide knowledge (~54%), to be able to learn independently, demonstrating a high level of understanding (~53%), to be able to develop new ideas, taking on long-term responsibilities (~49%), to help others by providing them knowledge (~38%).

Research participants' answers to the question on **the ability to organise their own process of learning** were positive, i.e. the majority of them agreed that this ability could be developed. No statistically significant differences between male and female respondent groups were noted.

However, statistically significant differences were noted in distribution of results by different age groups, i.e.: in early adulthood, 54.3% respondents agree to develop the ability to organise their own learning process, in middle adulthood – 43.4%, and in late adulthood – 30.4 % respondents. Statistically significant differences were also noted in the distribution of the

response “do not know” by different age groups: 8.5 % (early adulthood), 13.2 % (middle adulthood), and 30.4 % (late adulthood). Somer’d = 0.177. Approx. Sig. p=0.001, p<0.05

42.2 % male and 47.3% female respondents agreed to develop the **ability to learn independently**. Statistically significant differences between male and female answers were not noted. However, statistically significant differences were noted in the distribution of results by different age groups: 52.1% respondents in early adulthood agreed to develop the ability to learn independently, 38.8% - in middle adulthood and 44.4 % - in late adulthood. The results show that individuals are interested in developing the ability to learn independently not only in early but also in late adulthood. It has to be noted that individuals in late adulthood are even more interested in learning independently than people in middle adulthood.

Somer’d = 0.129. Approx. Sig. p=0.015, p<0.05

The results on the statement related to the **development of the ability to learn in groups** were distributed as follows: 39.8% male and 47.5 % female respondents agreed with the statement, 34.1 % males and 32.2 % females more agreed than disagreed, 15.9 % male participants and 11.4 % female participants did not know what to answer, 4.5 % males and 4.2 % females said that they more disagree than agree, and, finally, 5.7 % males and 4.7 % females did not agree with the statement. There were no statistically significant differences between male and female answers. No differences were noted in the answers provided by the participants from different age groups. Obviously, a greater part of the research participants would agree to develop the ability to learn in groups: in the early adulthood group, 47.9 % respondents agreed with the statement and 32.7% respondents more agreed than disagreed; in the middle adulthood group, 42.5 % respondents agreed with the statement and 31.3% of them more agreed than disagreed, finally, in the late adulthood group, 44.0% respondents agreed with the statement and 40.0% of them more agreed than disagreed.

Answers to the question related to the **development of the problem solving ability** were distributed as follows: 45.5 % male participants and 58.7 % female participants agreed with the statement, 28.4% males and 28.1 % females more agreed than disagreed. Male and female participants’ responses “do not know” differed, i.e. 15.9 % males and 7.7 % said that they do not know if they would like to develop the ability to solve problems. Besides, opinions also differed when answering “more disagree than agree”, i.e. 4.5% males and 1.3% females chose this answer. Somer’d = -0.166. Approx. Sig. p=0.013, p<0.05

33.7 % male and 45.3 % female participants agreed to **develop their ability to discuss their own learning**. Statistically significant differences were noted in the answer “do not know”, i.e. 25.8 % males and 15.1 % females chose this answer. Somer’d = -0.149, Approx.

Sig. p=0.029, p<0.05. Research results indicate that more male than female participants do not know if they would agree to develop the ability to reflect on their own learning.

Responses on the development of the ability to discuss one's learning were distributed by age groups as follows: in the early adulthood group, 48.8% respondents agreed to develop the ability to reflect on their own learning, in middle adulthood – 35.9 %, and in late adulthood – 29.2% respondents agreed to develop this ability. The answer "more agree than disagree" was distributed as follows: in early adulthood – 27.7 %, in middle adulthood – 32.1 %, in late adulthood – 33.3 % respondents. It is important to note that older respondents agree to develop the ability of reflecting on their own learning; however, in this age group, 25.0% respondents did not know how to answer this question. In early adulthood 15.7% respondents and in middle adulthood said that they do not know the answer to the question.

Somer'd = 0.148, Approx. Sig. p=0.007, p<0.05

*Table 3. Self-assessment of adult ability to learn*

| | | How do you rate your ability to learn? | | | | | |
|---|---|---|---|---|---|---|---|
| | | Excellent | Good | Average | Poor | Bad | Total |
| | Early adulthood | | | | | | |
| | | 16.5% | 50.0% | 28.0% | 5.1% | 0.4% | 100.0% |
| | | 51.3% | 52.9% | 44.9% | 46.2% | 20.0% | 49.5% |
| | | 8.2% | 24.7% | 13.8% | 2.5% | 0.2% | 49.5% |
| | Middle adulthood | | | | | | |
| | | 17.5% | 46.6% | 29.1% | 4.8% | 2.1% | 100.0% |
| | | 43.4% | 39.5% | 37.4% | 34.6% | 80.0% | 39.6% |
| | | 6.9% | 18.4% | 11.5% | 1.9% | .8% | 39.6% |
| | Late adulthood | | | | | | |
| | | 7.7% | 32.7% | 50.0% | 9.6% | .0% | 100.0% |
| | | 5.3% | 7.6% | 17.7% | 19.2% | .0% | 10.9% |
| | | 0.8% | 3.6% | 5.5% | 1.0% | .0% | 10.9% |
| | Total | | | | | | |
| | | 15.9% | 46.8% | 30.8% | 5.5% | 1.0% | 100.0% |
| | | 100.0% | 100.0% | 100.0% | 100.0% | 100.0 % | 100.0% |
| | | 15.9% | 46.8% | 30.8% | 5.5% | 1.0% | 100.0% |

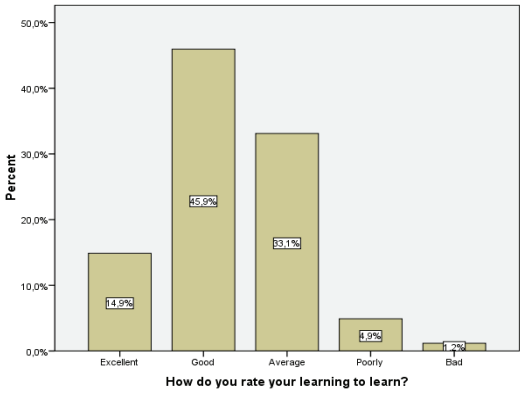



*Fig. 61. Research participants rated their ability to learn*

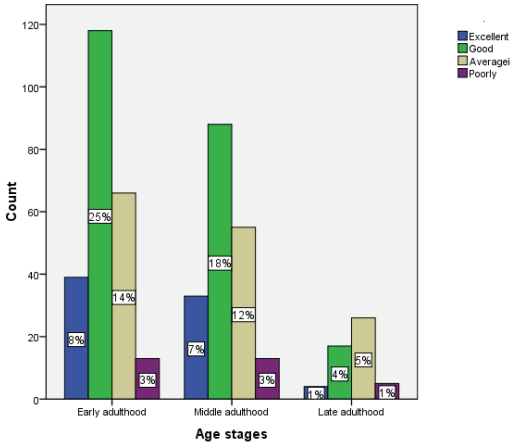



Fig. 62.The ability to learn at different age stages

Research participants rated their ability to learn. Results have revealed that ~46% respondents rate their learning as good, ~33% – as average, ~15% - excellent. ~5% adults rated their ability to learn as poor and only ~1% respondents said that their ability to learn is bad.

~5% research participants could not rate their ability to learn.

Learning to learn is relevant throughout life, i.e. in early, middle and late adulthood. In early adulthood learning to learn is important for young adults when looking for jobs; in middle adulthood learning to learn is important for middle-aged adult to retain their jobs; in late adulthood for older adults learning to learn is more associated with social activity. Besides that different age adults' approach to the development of learning to learn is connected with the development of their abilities (organising own process of learning, discussing their own learning, problem solving, learning independently and in a group).

### 3.3. Results of Qualitative Research on Adult Learning to Learn

In this section the results of qualitative research are presented, which help more clearly reveal the reflective experience of adult learning to learn in different cohorts.

#### 3.3.1. Young Adults Assessment of Learning to Learn

Even though research participants described reflective practice differently, they emphasised its importance in the process of learning to learn. Informants think:

*I think that experience gained in reflective practice helps to develop various abilities… [P1], ...team abilities are developed...[P2], ...you learn to listen and communicate...[P9]... you listen to different approaches...[P4]...get to know different cultures...[P8]... feel empathy... and start understanding others [P17]. It is very important to develop knowledge on adult learning [P16].*

Reflective practice is the art of realising and understanding different approaches and their importance.

According to informants:

*...this is an art of asking myself for ideas, thinking that I'm not perfect and learning from my own mistakes. It is from my own mistakes that I can extract (find) knowledge and abilities. Every adult learner and adult teacher must have this competence [P2].*

When discussing reflective practice, attention should be drawn to human experience and relations with other people. Research participants' thoughts confirm this idea. Reflective practice helps to search for meaning:

*This is something that, through the constant process of self-analysis, helps to find out the real meaning in actions [P3], but it requires more time to be able to discuss things,... to work in a group [P5], where group reflection is important; attention to other people, joy of being together [P4].*

The analysis of reflective practice has revealed that individual experience encourages self-analysis and development. According to the research participants:

*The meaning of reflective practice lies in what we can realise and understand or be aware of from previous experience. I can reflect on and assess what I've done and what I'm doing. It's an attempt to evaluate it through relations with other people. And to see what we get out of it [P6].*

Self-cognition is also important in the process of learning to learn. The participants emphasise the process of thinking through life/experience, claiming that:

*Experience-based learning is thinking about how our thoughts are formed and changed [P7]; reflective practice is getting to know oneself as an adult [P11].*

Human experience is important in reflective practice.

The participants have emphasised that the use of knowledge in practice is very important. Reflective practice ensures the appropriate use of present theoretical knowledge. Thus thinking through activity and one's own behaviour helps to use theory in practice successfully:

*Writing and sharing; learners'/teachers' feedback; discussions after group activities/project presentation; thinking about lectures later, in silence, and thinking what had happened and how I behaved myself [P8].*

To others it is: *learning by using gained experience and performing practical work [P19].*

An important part of the process of adult learning to learn is reflective practice:

*…maybe more important than theoretical knowledge. Theoretical knowledge is, of course, important but learning is meaningless if you don't know how to apply that knowledge in practice. So reflective practice... – how to use knowledge in practice [P9].*

The research participants emphasised the importance of learning to learn through practical activity.

According to them:

*Reflective practice is learning from personal practical experience [P16]; important to adult educator, something similar to meta practice – to perform practical work and learn through that [P17].*

Learning through collaboration is one of the abilities of the learning to learn competence.

The participants identified the importance of learning through collaboration in a professional field, performing a specific task.

*Collaboration with other people – it's more experience in a professional field [P20].*

Collaboration also facilitates learning:

*how to apply new information in different situations..., to think critically, to think through own conception and change it or some of its elements [P22, P23], and also reflection on action and learning from this reflection [P18].*

**Learners' values, personal features and skills in the process of learning to learn**

Learners reflected about their individual opportunities in the process of learning to learn

Third cycle students identified the following values of the process of learning to learn:

*tolerance, patience [D1, D3], hard work[D1], reliability [D3]. Communication of people with different cultural and educational background is identified [D14].*

Second cycle students highlighted the value of work and collaboration in groups.

Other individuals' opinion are also very important to a learner. Attention is drawn to sharing:

*knowledge with students from different cultures when cooperating and working in a group [P1, P4]. It is important to listen to others' opinions in the process of learning to learn [P3].*

When discussing individual possibilities in the process of learning to learn, learners emphasised:

*Strengthening oneself by expanding one's own transversal abilities [P1].*

Learners discussed their personal features in the process of learning to learn. According to them:

*In order to be more self-confident, listening to other opinions in order to reach agreement [P2]. Curiosity and being interested in different ways of life [P3].*

Important features:

*Friendliness, but you cannot always express your opinion because of language barrier (my English skills aren't very good) [P4].*

Third cycle students – adults (doctoral students) reflected on their personal opportunities and emphasised those aspects that they believed to be important.

Third cycle students emphasised

*Being friendly, open and willing to change and adapt [D1].*

The main drive of the process of learning to learn is:

*Knowledge pursuit, desire to learn more, where such personal features as leadership, diligence are important… collaboration [D20, D21].*

As each learner's work pace differs, each of them requires a different amount of time to complete tasks. Thus learning to learn is related to personal features of planning time.

*My work pace is slower than I expected – I like thinking through things, using more information sources, which requires more time [D6]*

Being able to adapt to others, to be flexible towards a proposed activity plan in the process of learning to learn is also important:

*In this situation I wanted to listen, to learn from others, thus I was flexible while in other projects I usually take the role of a leader. In this case I didn't feel strong enough as I lacked information technology knowledge… [D8]*

Group work has revealed the importance of time planning and task sharing. The process of learning to learn focuses on the following things:

*Important in the group work are task sharing, time management and linguistic competence, both English and other languages [D21].I've noticed my ability to work in a group and to share experience [D7].*

A positive attitude is very helpful when working in a group.

*It's helpful that, I believe, I never get tired of researching human nature [D15].also, positive approach towards group activities [D16].*

Listening to other opinions facilitates the process of collaboration.

*Being able to listen to others' ideas and needs and to find agreement (negotiating) and cooperate [D13]*

Thus the process of learning to learn is also a constant path of researching and discovery.

*It's more of self-development and thorough self-research in life [D14]*

Researches and discoveries often help to reveal problems, the successful solutions of which also depend on the learner's personal features.

*I was really scared to share my opinion initially, then frustrated, disappointed, angry, then, again, happy after formulating my aim [D17].*

"...Holistic learning as is a uniform process where cognitive, emotional and environmental factors as well as gained experience change individual's knowledge, skills, values and approach towards the world...." (Illeris, 2004; Ormorod, 1995, Vasiliauskas, 2011).

The importance of skills has been highlighted by the research participants in the learning to learn scenarios. The most frequently mentioned skills are linguistic and communication skills. According to the participants, it is important to know how to communicate to people. They also emphasise the importance of conflict solving skills. Their talks on skills involve personal, professional and social aspects. To conclude, it should be noted that learning to learn in the lifelong learning context is the balance of skills acquired throughout life.

### 3.3.2. Middle Adults' Assessment of Learning to Learn

#### Research Participants' Reflective Experience about their Learning to Learn

Learners who participated in this research were third cycle students, doctoral students, young scientists. Students participated in learning activities offered by organisers, including lectures and practical assignments set in the "Erasmus IP" programme. Scheduled activity was performed.

The following activity is distinguished: creating designs in the Moodle environment, using various references, mind maps, video and other techniques. During these intense learning activities, it is important to mention participation in cultural activity related to participating countries, cultural differences among these countries and their uniqueness. Learners stated that they had participated in all activities of the programme. The research highlighted learning to learn scenarios, provided in Table 4. Learners' discussions on the process of learning to learn involved discussion about activity scenarios. The ability to plan and organise their own activity/learning was identified by the research participants as one of abilities of the learning to learn process.

*Table 4. Learning to Learn Scenarios*

| Category | **Subcategory** | **Illustrations** | **Illustrations** |
|---|---|---|---|
| Learning to learn scenario | Planning, organising the process of learning to learn | We participated in activities set by organisers: lectures, practical activity [D3, D4, D5]<br>In cultural and learning activity [D21]<br>In all scheduled activities [D6]<br>Course design – skills of developing own course platform in the Moodle environment, developing a virtual course [D1, D2, D9]<br>I participated in preparing article material and in cultural activities together with other foreign country representatives [D7]<br>Working in groups we developed and adapted a virtual mobility course, supplemented by links, mind maps and video material [D8]<br><br>We designed study programmes, configured Adobe Connect [D10];<br><br>Joint course (with additional activities; discussions, decisions, work details). Attending lectures, a project for a joint article. Preparing a presentation and listening to others. [D12]<br>Practical application of Moodle and Adobe Connect [D11]<br>Discussions, presentations, writing reflections, exercised in the Moodle environment [D13]<br>Lectures, discussions, work groups [D14]<br>Activity where I participated was related to the intense Erasmus programme "Virtual mobility and learning". [D15]<br>Erasmus intense programme project on virtual mobility and e-learning [D16]<br>I participated in organised scheduled activity [D17, D18]<br>Lectures, practical tasks, group work [D19]<br>In an intensive course, activities where new skills and knowledge on virtual mobility and ICT tools [D20] | In a course taught by professors, preparing topics for an international project [P1, P2, P6, P12, P14, P18, P19, P20]<br>In professor's sessions [P3]<br>An entire camp as a programme: assessment in adult education, higher education being available to adults [P4, P5, P6, P12, P20]<br>Joint course: relationships, mutual relations and communication to adult educator<br>[P6, P7, P9, P12, P14, P15, P16, P18, P20, P21, P22, P23]<br>Work in a team for an international project [P10, P16, P19], presentation, conference [P7, P9, P15, P18, P19]<br>Everywhere: conference, lectures, seminars. Simply, the EMAE camp [P8, P13, P19, P20]<br>In all activities, especially work groups and projects [P11, P13, P15, P17, P18, P19]<br>Teamwork [P13]<br>Intercultural activity [P14, P15, P16, P18, P21, P22, P23]<br>Sightseeing [P16, P21]<br>All activity sessions [P17]<br>Exchanging experience with other students[P21] |

When discussing the process of learning to learn, learners talked over activity scenarios. An ability to plan and organise their own activity / learning was identified by the research participants as one of the abilities of the learning to learn process. Dimensions of the ability to plan and organise the process of learning involve information transfer, supervision, joint activity, counselling and assessment – expertise. Information transfer and joint group activity with consultations from teachers were the most frequently mentioned aspects of planning and organising activity. This has clearly been seen when analysing research participants' thoughts.

Research participants distinguished constantly changing ways of learning to learn, emphasising preparation (planning), essential conditions, aims, the structure and duration of learning outcomes, teaching and learning methods and assessment strategies.

*I started realising how to plan the process of learning in Moodle [D1]. How important it is to plan a course, preserving key ideas on the structure, aim and objectives of that course [D19]. I think that new*

*skills are important when designing a course… I'd like to emphasise how the way (method) of learning to learn changes [D5].*

*We learnt to work when designing a course, programme (essential conditions, aims, the structure and duration of learning outcomes, teaching and learning methods and assessment strategies)[D4, D11].*

The analysis of data helped to identify specific features of group work. Informants stated:

*I got to know how to design a course programme in a group and what happens when people from six different universities with different attitudes and education meet in a situation like this. Thus I found it very useful and interesting to find out how everything happens when designing a programme [D14].*

*I found out how to organise group work respecting different opinions; to draw a general plan*

*I found out how to organise and perform certain activity. We, as a group, were introduced to communication tools [D16].*

*I should say that new things that I've learnt are related to people working in a group, how they work designing something and what different courses could be [D3].*

Learners face challenges; however, when these problems are analysed, learners gain new knowledge and, as a result, give learning a new meaning.

*Challenges that I faced (in my group) are rather similar. And in such a way, talking about problems, we can gain new knowledge, insights, give new meaning (to learning). It is easier for me to work in a group when learners have similar professional expectations and aims [D22] I could learn how to learn in a group, how to teach, I heard new ideas… I got new ideas about group work and how to make a course more consistent in the context of lifelong learning and globalisation [D3].*

Analysis of informants' results helped to reveal their self-evaluation. Informants claimed:

*I gained more knowledge on assessment and e-assessment in Education science and how to achieve good learning outcomes, which also depends on teachers' instructions, their activity and assessment (D6).*

*I learnt how to distinguish evaluation from self-evaluation and what their differences are [D20]*

Planning the process of learning should focus on new technologies that facilitate the process of learning itself and the search for important information. All these aspects influence the learner's learning to learn.

*I found out that new technologies are important in the process of learning to learn as they help us to search for relevant information. I got to know more about steps of the process of planning. And I learnt all these things in two weeks [D21].*

*I learnt to use Moodle and plan the whole process with the help of technologies [D24].*

*We learnt how to start working from the very beginning with our group: 1) how to apply knowledge; 2) how to organise work taking into consideration specific features of our group [D25]*

When performing tasks, it is important for a learner to be aware of how the entire process works. Tasks should be provided to a learner consistently. Difficulties arise in the process of

learning to learn when a learner does not understand or cannot complete a task on time. Thus in this case the ability to plan and organise the process of learning is extremely important. Moreover, group leaders stand out as they apply their ability to work both independently and in a group, directing an entire group towards successful work, solving problems, and helping other group members who cannot complete their task on time.

*When we get a task that requires our time and attention, it's very difficult to start a new task without having completed the previous one. I think that our entire group faced this problem… [D26.]*

*It's important to identify group members' strengths and involve everyone into successful group work. Once we join all group members' skills, we become strong and completed tasks… a great group [D4].*

Upon generalisation of research participants' thoughts and ideas, it should be noted that the ability to plan and organise the process of learning is frequently mentioned in research participants' reflections. The importance of group work in planning a consistent course is highlighted.

The ability to plan and organise learning and activity is one of abilities of the learning to learn competence. Research participants' reflections have revealed that attention is drawn to this ability when discussing what learners learnt and what ideas they could apply in their work and researches. Research participants have also emphasised the importance of the ability to plan and organise learning and activity in the process of learning to learn both conducting research and planning their own practical activities.

The research has also focused on the ability to learn in groups, collaborating with each other. Although not very significantly but the ability to learn and act independently has also been identified, especially when a group faces a problematic situation. It is in such cases when certain group members stand out as being able to solve problems independently, taking initiative and looking for positive decisions.

**Learning to learn in the intensive programme**

The analysis of participants' opinions on the process of learning to learn during the intensive Erasmus programme has revealed several key aspects of working in the groups that were formed of individuals from different countries. Research participants expressed their thoughts on what new and original they had learnt in programme activities. The strengths and weaknesses of participants' learning to learn were identified. Young adults mentioned significant cultural aspects:

> *I learnt about many differences and similarities among countries… [D7] ...I had a possibility to work in groups with people from different countries with different culture, education, knowledge, language skills… sometimes it's difficult, but I've learnt a lot from*

*them… [D8], theoretical and practical aspects, other learners' (doctoral students') experiences can be distinguished [D1].*

The cultural aspects of participation in scientific activity were identified. Research participants noted:

> *Organising an international research / scientific team can be very useful, creative… as well as enjoyable [D12]. New participants' approaches are revealed; new content provided by teachers and participants [D21].* The importance of learning to learn while participating in an international group is emphasised. According to the participants, they *had learnt new foreign words and also how to work in diverse and intercultural environment [D17].*

The participants noted that their experience had changed during this period because of "a working group", work in groups, peer support and project-oriented work. Work in groups where different cultures merge and finding a common decision were identified as one of challenges that individuals had to overcome. One learner emphasised that work in a group can be a very interesting experience and that she had worked with her students in a workgroup (and cooperated) and thought that it is a very simple and easy method; however, she can now see that it is a complex problem, especially in a mixed group.

**Learners on reflective practice**

Reflective practice is used as a means for improvement. It can be used to think through one's behaviour, as well as for academic, social and psychological purposes. It is used for academic purposes when a learner realises that they lack knowledge to make an appropriate decision. It helps socially when learners realise after reflecting that they have to improve their social skills. Finally, it is used for psychological purposes once a learner realises that they should use another method to react to a particular situation (Roffey-Barenstein, Malthouse, 2013). The participants' ideas have revealed the complexity of the phenomenon of reflective practice. It involves both the learner and their processes of thoughts, as well as the learning context, subject objectives and critical reflection. The informants stated:

> *I think that reflective practice is concentrated thinking about a particular subject… there are also critical reflection, thinking through the context itself, participants and objectives [D1].*

The different methods of reflection that learners use were identified:

> *...I usually don't write reflections. Recently I've tried to put everything into mind maps and sometimes go back to them. To reflect in such a way. I also reflect when watching recorded material [D2].*

For the process of learning to learn to be successful, learners have to understand their experience and to stop and look at this experience from outside. This is what several informants noted:

> *... I often try to look at my experience from a different perspective [D2, D3, D6, D8, D18].*

The participants' answers have revealed that being able to reflect helps to analyse their own experience through revealing the search for meaning, i.e. analysing positive and negative, as well as useful and useless things and aspects.

It is important to analyse experience in order to find and reveal positive aspects that might be useful in the future. Informants stated:

> *...I think that if I reflect on my experience, I have more chances to use everything in future… what's positive or negative; useful or useless etc. I try to analyse the value of experience… [D4]*

Reflection is important in every experience, i.e. the process of learning, professional or personal daily activity. Thus high-quality life requires thinking through and analysing one's own experience. Many informants described reflection as an important part of their lives. According to them:

> *...Surely, real reflection is a part of my life... ...I constantly keep reviewing my daily experience, for example, learning, professional, etc. ... I cannot imagine my life without being able to reflect and write about that, even though I have at least twenty years of experience… [D5, D6, D4, D11].*

Reflection helps a learner to get to know their strengths and weaknesses and to choose appropriate learning to learn strategies and improve their performance. According to one participant this is:

> *A type of meta-cognition, practice of consciousness so that we could identify our strengths and weaknesses and would improve our performance [D17].*

Thinking is important both in learning to learn and when performing certain activities. People think when performing every activity, in every stage of this activity.

> *Reflective practice is an ability to reflect on acts, to get involved in the process of continuous learning. When we reflect on ourselves and on what we've learnt, we notice lots of new things that we didn't notice before. We realise that we've made mistakes and that we've gained new skills. In other words, we keep learning [D8, D9].*

Reflective practice enables individuals to organise their work more successfully, giving it more meaning and pursuing set aims:

> *I improved my speaking (linguistic) and work techniques. When reflecting, I can better understand what I actually do. It has become easier for me to set goals, organise my own work and increase efficiency [D12]*

*Reflective practice helps me to organise my thoughts as well as work-related emotions [D13].*

*The entire construction of the course was on reflective practice as we had to concentrate on the programme. Also, the experience of self-growth… about the course: reflecting is also related to the need to think through topics that you plan to provide to students [D14].*

Reflective practice is essential in the process of learning to learn. Research participants' answers confirm the importance of reflective practice in the process of learning to learn. The process of learning focuses on present and new knowledge and joining this knowledge.

*This is a process of conscious learning where existing knowledge and new ideas are joined, thinking them through etc. [D6].*

Such stages as planning (using existing experience) and observation are important in the process of reflective practice. When participating in the process of reflective practice a learner strives for results. As the research participants noted:

*It was a chance to put into practice what we planned through experience and observation in order to reflect on our results and objectives [D7, D8, D14].*

Learning is a lifelong process. Being able to reflect is a constituent part of this process. Reflective practice is a form of learning to learn. According to the research participants:

*I believe that reflective practice is one of the best forms of self-learning where we think about activating the process of "giving meaning" related to daily events that we neglected [D15].*

Reflective practice helps to think through performed activities and behaviour during these activities.

*A way to think through completed activities and the growth of personal behaviour [D16]. It is for me, so that when we work and think about that at the same time and later use thinking through again at the work that we perform [D19].*

Reflective practice is related to the process of learning to learn where the importance of critical thinking is highlighted.

*Practicing reflecting on one's own learning and developing skills of critical thinking [D20].*

Human connections are very important in the process of reflective practice. During this process its participant relates past, present and future learning/activity practices, understanding what else has to be learnt and improved.

*Reflective practice requires competence and is necessary for every professional. So an individual has to sum up his/her own practice, relating it to previous and future practices. It is also important to determine what went wrong, what went very well, what should be changed, what else we should learn and how I can search for all this. It means contacting other people and developing critical thinking skills [D21].*

Reflective practice is inseparable from sharing knowledge with others, which also involves making learning to learn meaningful.

> *The most reflective practice that I can still feel going though my veins is the importance of sharing and knowing [D18].*

The analysis of the research participants' thoughts has revealed that young scientists believe communication with each other to be important; however, the priority is given to the programme provided by organisers, focusing on its strengths and weaknesses when working with people with different social and cultural experiences.

Being in an activity was a new experience for the research participants. Learning to learn is related to knowledge when performing an activity where attention is drawn to relations with other people.

The research has confirmed that learning to learn involves three dimensions, i.e. the aspect of cognition (knowledge and skills), emotional dimension (feelings and motivation) and social dimension (communication and collaboration) that are linked by the social context. Third-cycle adult learners' assessment of learning to learn is related to the aspect of cognition, social and emotional dimensions. Reflective practice is important for learner's academic, social and psychological development.

### 3.3.3. Assessment of Senior Adults Reflective Experience on Learning to Learn

The concept of learning is based on two main assumptions. The first of these indicates that the whole process of learning consists of interaction with the external world (external interactions), the learner's social, cultural and material base, as well as an internal psychological process where attention is drawn to present knowledge related to previous learning. The second assumption focuses on the fact that learning involves three dimensions, namely, the cognitive aspect (knowledge and skills), the emotional dimension (feelings and motivation) and the social dimension (communication and collaboration), that are all included in the social context (Illeris, 2003).

Discussions with research participants on the benefits of practical activity have shown that their answers could basically be divided into two key groups, i.e. answers where feelings dominate and answers where knowledge and professional experience prevail. The answers given by participants in the research are presented according to the construct in Figure 10, which shows the expression of the reflective experience in adult learning to learn, emphasizing the participants' knowledge, skills, personal qualities and values.

**Focus group A ”foreigners” (seniors) results**

When talking about their activity, research participants remembered their past and their previous work experience. A Greek language teacher enthusiastically recalled times when she had participated in projects with children and felt very responsible for them. This situation is easier as her activity involves more physical work. This research participant compares work to learning a language.

Enjoying the environment at their practice place, research participants compared their activity to music and art. These comparisons are a way to express their feelings. Participants vividly spoke about their work and similarly described their activity. It was stated that:

> *...work is a meditation, philosophy, poetry, music… It is a way to forget things, to relax; it's a form of meditation [J, H, K 03/07/2012].*

Focusing on feelings, some important thoughts are:

> *...it was something new and very important: to overcome an obstacle and preconceived mood… It was a pleasure to do that…". I learnt… not to be afraid of my own feelings… [J, K. 21/07/2012].*
>
> *I could enjoy life and didn't do harm to other people and environment [F. 18/07/2012]. I could listen to my heart...[K.21/07/2012]. It was also a chance to express myself, my own feelings...[J. 09/07/2012].*

To summarise participants' thoughts, it is important to note their positive attitude towards activity and their willingness to learn unknown things:

> *...we will learn everything we have to, we will participate, do everything [J. 04/07/2012].*
>
> *I'm here for just a short period of time so I want to do, to see as much as possible…I'm in a hurry to do things [A. 09/07/2012].*
>
> *We do not learn for school, we learn for ourselves, for our life… these activities brought me joy to work together [H. 18/07/2012].*
>
> *It was a pleasure to participate in these activities [A. 21/07/2012].*

Attention is drawn to learning through communication with others. Such learning is very important for older learners. Spending time together with others is very meaningful to older learners. Their thoughts reflect the importance of learning:

> *I perceive learning as knowledge, as something new that we find out about an object; feelings, how we do things, what psychological, spiritual aspects are revealed; lifelong learning ideas are significant in open communication [J. 2012/07/04].*
>
> *This is yet another valuable experience in life. We learn for the entire life… [S. 21/07/2012]. And I feel that I want to thank those people as it is from them that I learnt various techniques, do things… [H. 21/07/2012]. Talking about changes of practical experience, of course, everything changed to better… when you work, do things yourself, use your imagination [F. 21/07/2012].*

Learning through different activities, a learner not only gets to know new, original things but also recognises his/her feelings.

When answering the question on what unknown, new, or original they learnt when participating in activity, research participants emphasised very different knowledge-related things:

> *I learn how a Lithuanian university operates. I learnt some gardening… I learnt how various plants are used to treat certain medical conditions… [A. 21/07/2012]. I had previous knowledge on plants. I found out here that the plants that we have in Greece also grow in Lithuania; they're just called differently here. Nature in Greece and in Lithuania, even though there are differences, has similar things. I was aware of a number of plants used for treatment, but I enriched my experience and knowledge about medical herbs... [S. 21/07/2012]*

Besides, feelings of being and working with other people were revealed in this process.

Activity and physical work provide learners with the possibility of doing some physical work and spending time with other people. Research participants focused on communication that they, especially those who live alone, often lack at an older age. This is confirmed by the following respondent's words:

> *I have friends but I'm all alone when I come back home. It's a psychotherapy… it's good, it's what I lack. It's an opportunity to express myself. I'm interested in plants. It's also interesting to me, I learn new things… [J. 09/07/2012]*

Discussions on personal features that research participants recognised during this process and during learning through activity have revealed that:

> *When you work with other people, it is important to be patient and love your work [F. 21/07/2012],*
>
> *I clearly felt that when working with disabled children you have to be very thoughtful and attentive. These children really love what they do. [K. 21/07/2012]*
>
> *I used my communication abilities, I could feel this being together. Being near disabled people I felt responsible, I tried to be empathic towards them [J. 21/07/2012].*

**The analysis of the informants' results** emphasised the importance of group work. The participants mentioned that they liked to work with the other people in the group in any environment; they expressed themselves with great emotions:

> *I liked to work together with others; I am willing to work with others in any circumstances… I should mention that I improved my ability working in a group… and ways (methods) to work with others at this level and at any other level… Work in a group was important for me, what I've already mentioned, I worked collectively at any circumstances and I loved doing that… During the visit in Tauragė, being able to be friendly, to be with other people and work in the context where I was… [S. 21/07/2012].*

*I felt stronger working with others in a group. I noticed that when working with others I can create a positive atmosphere to others [H. 21/07/2012].*

Without a doubt, some people expressed different opinions on group work, which helped to clarify the understanding that there should be no borders among people.

*To tell the truth, the most complicated thing that I could not master being here was working in a group [A. 21/07/2012].*

However, the importance of relations among people was emphasised:

*I met five new friends from Greece, I met interesting people in Lithuania; people who do not need to be divided, shared. This helps me to believe that there should be no walls among people [H. 21/07/2012].*

Once asked about competence acquired in their life and used in this activity, research participants expressed the following thoughts:

*My knowledge about soil, I applied my knowledge about soil; my love for plants [H. 21/07/2012]; I used my experience with disabled people, where I had experience and used it in my life earlier. So I used my experience on how to communicate and work with those people from the emotional perspective. I used my skills… [A. 21/07/2012]; and creativity, what I believe I have [F. 21/07/2012].*

Focusing on things that changed from the arrival day to the departure day, the majority of answers were related to relations among people. The most important thing that research participants emphasised many times was people that they met:

*I found a new friend and in my country...[K. 21/07/2012],*

*This is yet another valuable experience in life. We learn for the entire life. I communicated more with people in Lithuanian. New experience in a country that I didn't know. I found new friends from Greece and Lithuania… [S. 21/07/2012],*

*I met five people, we experience a lot together and I believe we'll be friends and will meet in Greece and also I hope we will meet you as we spent some great time together. We got to know each other not only as volunteers but as people. That was very important. The change in me is related to people…, we exchanged ideas and experience…, future for these relations… [J. 21/07/2012].*

Research participants emphasised that they feel happy, are full of energy and do not spend time sitting at home. They can choose their activities themselves. They share their joy meeting other people and claim that there are no misunderstandings when such people meet and communicate among themselves. They get even closer:

*When a person meets another person we realise that there aren't many differences between us. The most important thing is to cherish and share human values [K, J, H 18/07/2012].*

After generalising research participants' thoughts, new relationships among people can be identified as the most significant change from the day of their arrival to the day of their

departure. These relationships help elderly people to feel better and are related to their future. Research participants find these relationships pleasurable and significant not only in everyday communication but also in getting involved in new activities and learning to do new things.

Social relations are an integral part of human life and provides quality. The research has also revealed that new relationships played an important role in helping research participants not to feel lonely anymore. Only one research participant had difficulties when working in a group; therefore, she spent the majority of time working individually.

Positive relations among people are very significant in the process of learning to learn.

***Focus group B "natives" (seniors) results***

Lithuanian research participants' thoughts, where feelings are prioritised, supplement Greek participants' thoughts:

> *We saw mutual relationships: wife and husband. And children as well, we discussed all that… We were pleased with how they communicate with each other and their children. That's how everything looked from outside. Unique relations of three generations – parents, grandparents and children [V, N. 26/10/2012].*

Research participants emphasised communication among people:

> *Very warm communication. Their communication, sometimes it seems that they haven't seen each other for a long time [R, N. 26/10/2012].*

Feelings are emphasised as elderly people spent the majority of time to discuss their feelings. However, new knowledge is also important in a foreign country. As the participants noted, many things seemed unknown:

> *Sort of unknown, as we haven't even touched it… [R. 26/10/2012].*

However, participants used to draw their attention to promoting the feeling of community. For example, research participants were hugely impressed by time spent at church on Sundays.

> *Community members meets each other at church on Sundays. They know each other [L. 26/10/2012]. We witnessed Christening,*
>
> *Everything is very ceremonially, very nice, very festive mood. Family is a value.*
>
> *Very ceremonial, food served at churchyard... With gift bags for each guest [V. 26/10/2012].*
>
> *International Catholic community gathered together. Texts provided in various languages. But the ceremony performed in Greek… a crowd of people, black and Chinese people, very diverse crowd at Church [L. 26/10/2012].*

An interesting aspect to note is that everyone applied their professional knowledge. When asked what knowledge they had applied, research participants noted things that are related to their profession. An English language specialist said:

*I could use it the most, I was their interpreter [L. 26/10/2012]. A doctor took care of everybody [L. 26/10/2012]. I was thinking to myself, but everything went fine, no one ate too much. Swimming in the mornings and evenings, everything went fine. They used to tell time and we came on time – either for breakfast or lunch. I wasn't very keen on using my experience and, thanks God, I didn't have to do that [N. 26/10/2012].*

The teacher was very sociable and organised and could communicate with everyone in Lithuanian:

No problems *[L. 26/10/2012].*Told me that I spoke all languages *[V. 26/10/2012].*

One research participant, a former veterinarian, emphasised specific plants, landscape and noted that:

*nature is terrific, everyone saw that...[R. 26/10/2012].*

*I, personally, was impressed by nature. I was amazed by unseen bushes, trees or hills... both flowers, bushes and trees [L. 26/10/2012].*

To generalise research participants' thoughts, learning in different cultural environments should be distinguished. The emotional dimension of learning to learn was emphasised as participants initially drew attention to the importance of feelings in their activity.

The participants also emphasised the aspects of communication and collaboration, as was proved by group work. Older respondents highlighted the importance of relationships with other people; mutual communication was necessary and the aspect of cognition was related to their profession that they practice for a long time.

### 3.4. Learning to Learn Scenarios in the LL Paradigm

Human life is inseparable from physiological and psychological changes. So learning to learn scenarios faced in different situations are unique to each individual.

When talking about learning to learn, the research participants claimed that they experience this process in daily activities through their entire life. The participants identified learning to learn in a number of their activities. Learning can be both direct and indirect.

People learn though communication with other people, which is extremely important for older adults. When describing their experiences, the research participants emphasised their relations with other people as essential as the starting point for other aspects of learning to learn.

When talking about learning to learn, the participants highlighted the importance of values, emotions, personal features and skills. Life-long experience has also been noted.

Research participants' thoughts on learning to learn at home and at work are presented in Table 9.

**Daily learning to learn**

The following table provides the respondents' thoughts on learning to learn scenarios in their life.

*Table 9. Learning to Learn Scenarios: learning at home and at work*

| Category | Subcategory | Respondents' answers |
|---|---|---|
| Learning to learn scenarios | Learning to learn through daily activities (in the majority of activities) | Learning is a part of my life daily, from the morning till night. And I think that learning is in the majority of my activities...[V]<br>Thus I noted that I keep learning all the time, it never stops. People learn at work, they learn both formally and informally, thus learning never stops...[K]<br>Learning to learn is an ability to reflect, to be reflective in every situation. On myself and the object and the situation where I am [V]<br>Without a doubt I learn, even being here, in this situation with you, I learn. How we act, react, how we behave, where we stand... [K]<br>Thus we learn in life. Surviving, adapting – everything is learning. Everything changes when getting ready for the other function, e.g. something basic, essential in life [K] |
| | Learning to learn in family | Without a doubt, an example in family life. Life in family is very rich from the point of view of learning and this learning method (type) and this learning is indirect in certain situations [V] |
| | Learning to learn through relations with people | The most important thing is what I learn that is new, a way to talk to a person, to be with a person and maintain relations at different levels with people…because other things come from that [V].<br>That's how I can study theory, a new learning object, but it's very difficult to learn to stay human, as this essence influences and determines other things in my daily life [V]. |
| | Profession-related learning to learn | ...but this learning is more profession-related, what I studied at university.<br>To sum up, what I studied is very important to learning in my life as mum... [V]<br>I am engineer thus I do everything following logic. I'm a logical thinker. When people talk, I draw sketches, mind maps. Yet another thing – social psychology, pedagogy, marketing. In knowledge transformation, what we were before, marketing – how people sell themselves and buy. Education is simply selling and buying, if you follow the principles of marketing, what education does, everything on the opposite… |

The research on learning to learn has emphasised four key aspects of adult learning to learn scenarios. They are as follows: learning to learn is experienced daily during different activities; learning to learn is experienced not only at work but also in family life; adults relate learning to learn to relations with other people; learning to learn is linked to the adult's profession (and not only to adult's current or past work but also to knowledge acquired during studies).

**Personal features**

An important role in learning to learn scenarios is played by an adult's personal features. Research participants' thoughts on personal features are presented in detail in Table 6.

*Table 10. Personal features of adults when learning to learn*

| Category | Subcategory | Respondents' answers |
|---|---|---|
| Learning to learn dimension | Personal features | Strengthening oneself by expanding my own transversal abilities [P1]<br>To be sure, to be more self-confident, listening to others' opinions when trying to find an agreement [P2]<br>Curiosity, interest in different ways of life [P3]<br>Friendliness, but you cannot always express your opinion because of language barrier (my English skills aren't very good) [P4]<br>I also learn here, as I see that different systems are used in different countries. It's also learning, looking for balance.<br>My personal competence, social, methodological, the one that I can apply everywhere, professional competence. My personal features – one thing that I believe to be important is being open. I believe I am open to everyone and everything [K]<br>Now about social – this part is very important to me as you have to function in social environments. It's easy for me to talk to people, I can be a team player. As far as I can, if I have energy, I support others. I like helping other people…<br>But without knowing yourself, without knowing relevant values, it's important to develop personal features [V].<br>Friendliness [D1, D9]; Friendliness, but I cannot always tell my opinion, because of the language (My English is not very well) [P4]<br>Openness, I am open to the people [D1, D11];<br>Willingness to change and adapt [D1];<br>Readiness to support our own teachers as if they were students, too [D5];<br>Collaboration [D21];<br>Flexible [D8];<br>I'm a little bit shy [D11];<br>Security about myself and increase my transversal ability[P1]<br>To be more sure of myself, listen to the points of views of others and try to find an agreement[P2]<br>The curiosity about different ways of life [P3]<br>Reliability, patience, tolerance [D3]; |

Discussions on adult personal features highlighted the importance of the pursuit ofknowledge, learners' will to learn more and diligence, as noted by Respondent D20, as well as self-development and profound self-analysis in life, as Respondent D14 indicated. These answers prove and highlight the necessity for the adult's will and disposition to participate in the life-long process of learning to learn. Without a doubt, the adult's emotions are also important, as Respondent V vividly expressed. According to her, emotions are very important [in learning to learn] as they are part of cognition. *No cognition is available without emotions being involved. Thus if I do not know emotions when answering questions, life goes further not in the way I*

*would like it to happen. I'm talking about internal things, not external ones, about structure, these aspects are important.*

Values should be perceived as the basis of human life, activity and participation in the process of learning to learn.

**Values**

The participants in this research emphasised values in the process of learning to learn. Respect for other people is one of the most important of them. Respect helps to build positive relations among people and create a positive environment for adult learning and development. Respect and honesty are the two key values mentioned by the research participants irrespective of their age. Special attention is drawn to responsibility for other individuals, respect for life and the human. According to the research participants, it is important to remain the creator of positive situations.

*Table 11. Values of adults when learning to learn*

| Category | Subcategory | Respondents' answers |
|---|---|---|
| Learning to learn dimensions | Values | I think values are very important. First of all I think about values and then about skills and personal features. It's so because values are respect, responsibility for life and person when performing tasks... [V]<br>Tolerance, patience [D1, D3] hard work [D1], Reliability [D3]<br>Communication of people with different cultural and educational background [D14] ; Share knowledge with students from different cultures [P1]; Important to hear other opinions [P3]<br>Work in groups, collaboration [P4]; Thus learning environment should have respect. Push them to grow; helping others. It's a value... [K]<br>Every part of this subject depends on values. It's both positive and negative because values are always positive. Sometimes negative values exist. Thus this moment is very important to me. Questions are important for me – what I do often, what's important in my life, what's important in work and family is to develop society, to develop interrelations, maintain communication and relationships based on good values. But it's hard. Everything that I've mentioned is difficult.<br>Thus psychologists agree that it's possible to develop personal features but it's impossible to self-develop personal features and skills without values as the basis [V]<br>For me the most important thing is to respect others. Even if people are negative, you should still have respect. Even when you face different approaches or beliefs, if you respect others, you give another person a chance to continue their life, their learning and development. When creating an environment based on respect, we give other people a chance to learn. Even though people differ, they want to improve. It gives them pleasure [K]<br>Being responsible for a person, work tasks and works.<br>Yet another value is justice. Try not to be too strict towards the other person.<br>For example, being able to create a positive situation is a value. B a good, honest person in that situation. Honesty is very very important. But it's a problem, it's difficult to be honest and sincere at work. |

According to the research participants, values are very important. Respondent V has noted that the first thing she takes into consideration is values, followed by skills and personal features. Research participant K believes that respect should dominate in the learning environment. The respondent indicates: what is important… in life, what is important at work and in family life, to develop society, to establish mutual relationships and communication based on values. When we create respectful environment, we provide people with will to learn. Even though people are different, they want to develop and improve, it gives them pleasure… [K]. More adult participants' thoughts are provided in Table 11.

**Experience**

Adult research participants' thoughts and opinion on experience as a learning to learn dimension are provided in Table 12.

*Table 12. Adults on learning to learn experience*

| Category | Subcategory | Illustration |
|---|---|---|
| Learning to learn dimension | Experience | ... I feel a different situation from the beginning till the end. The situation differs. My experience is very important when implementing abilities. Life experience is very important. And I know that, especially for the last 10 years, I think about experience when I'm a mature young woman, I use life experience to be better, to improve the situation to be better. But I think about experience, so I ask myself what I've learnt from this experience in my life, but not necessarily related. This is a task that I've given myself now. What I learnt when dancing, for example, is a completely different situation compared to the one that I experience now. [V]<br>Experience changes me; I always think that important things are... to be open to others, I trust other people, but I now pay attention to that, it's not very positive but that's what I've learnt from my experience. For example, I learnt not to say everything I think. For example, it's yet another situation, I learnt to be positive rather than negative when dealing with a situation. First to be positive and then negative. When I was young, I used to react negatively first of all and then – positively. My approach towards life has changed completely.<br>I use life experience to be better, to improve the situation [V] |

Respondent B believes life experience to be very important. Experience changes individuals. Research participant V stated: *I feel a different situation from the beginning till the end. The situation differs. My experience is very important when implementing abilities. Life experience is very important. Experience changes me.*

**Skills**

Adult research participants have also identified skills that are important in the process of learning to learn. The participants mentioned that their experience during this period has changed due to peer help, group work, "working group", project-oriented work etc.

Among the difficulties mentioned was how it hard and demanding it was reaching consensus in the intercultural groups.

One of the participants emphasized that work in group can be an interesting experience, and that she worked with her students using "working group" (and generally collaborative work); she also thought that this is very simple method, but now she sees that it is a complex problem, especially in different groups. Skills are presented in more detail in Table 13

*Table 13. Learning to learn skills of adults*

| Category | Subcategory | Respondents' answers |
|---|---|---|
| Learning to learn dimension | Skills | Social skills, communication [D1];<br>Communication [P4];<br>IT, language skills [D3]; language skills: English language [D10, D14, D21]; To improve English skills [P1];<br>I enriched and changed my understanding of the Lithuanian culture and history and its relations with Poland [D12];<br>Work in intercultural context, my empathic and communication skills [D15];<br>I improved my Moodle skills [D19];<br>Group work (distributing tasks, time management) [D21];<br>To implement a multinational project [P1];<br>Public speeches, implementing a multinational project, practice English, work in group, focus on cultural differences [P2];<br>Being able to work when faced with problems [P3]; |

The research has revealed the importance of linguistic, technological, methodological and social skills when reflecting on learning to learn.

*Table 14. Communicational skills of adults*

| Category | Subcategory | Respondents' answers |
|---|---|---|
| Learning to learn skills | Using language | Linguistic [D1], communication [D1, D2]<br>Communication skills [D3, D18]<br>Communicational competences [D14]<br>Knowledge of English [D12]<br>Speaking English [D5]<br>The chances to use my competences in communicating in English [D15]<br>Language, Language competences [D8, D21]<br>Language skills [D14]<br>Academic writing skills [D19]<br>Speak in public [D21] |

Linguistic, communication and academic literacy skills are emphasised in learning to learn. Attention is also drawn to English language skills and communication in English, as well as to possibilities to improve practical English skills.

*Table 15. Technical skills of adults*

| | | |
|---|---|---|
| Learning to learn skills | Technological | Use of ICTs competence [D1, D5]<br>Competences to use Moodle, competences to work with ICT [D4]<br>ICT skills [D8, D18]<br>ICT knowledge in order to prepare curriculum [D10]<br>Topics related to ICT mostly and programming in general [D9]<br>Designing course in virtual environment [D2]<br>Telecommunicating [D5]<br>Digital [D6]<br>Knowledge of Moodle [D12]<br>Moodle usage [D19] |

Discussions with the research participants on learning to learn have revealed the necessity of using information communication technologies when learning and developing computer literacy.

*Table 16. Methodological skills of Adults*

| | | |
|---|---|---|
| Learning to learn skills | Methodological | Problem-solving[P4]<br>Competences to do research, competences to plan an e-course, to design it. Competences in pedagogical process [D4]<br>Research – based skills:... theoretical skills, methodological skills [D20]<br>Planning and organizing – teaching material [D21]<br>Teaching experience [D12]<br>Didactic... [D6] |

Solving problems is one of key skills in learning to learn. Adults have also highlighted the importance of methodology, research, learning experience based skills, and planning and organising learning to learn.

*Table 17. Social skills of adults when learning to learn*

| | | |
|---|---|---|
| Learning to learn skills | Social | Work in a group [P2]<br>A lot! Social... [D8]<br>Moderating the discussions inside the group<br>Mediation... [D16]<br>To collaborate with members of group [D17]<br>Relationship skills, etc. [D18]<br>Group work [D19]<br>Understanding others' points of view, conflict resolution [D15]<br>Group working; syllabus writing [D11]<br>Social skills (integration, new acquaintances) [D12]<br>Competences connected with cooperation [D14]<br>Collaborative competences [D21]<br>Collaborating. Supporting peers. Confronting pressure [D5]<br>Ability to interact with people from different cultural backgrounds [D20]<br>I could share my knowledge about cultural things [D7]<br>Collaborative,... socio cultural, communicative, reflective [D6]<br>Ask questions, to discuss [D13] |

Discussions on the significance of learning to learn have drawn attention to collaboration with other people. Such aspects as group relations, communication and support, work in pairs and being able to share thoughts and discuss everything with other group members indicate that social skills are key skills in learning to learn. Participant V said: *learning to be in a group. It's not easy to be in a group, to work in a group as you have to get to know yourself. Thus I use this ability at work and at home, being a mum, a wife or in other social situations. Because it's important for me to be the same in all life situations [V].*

According the Pedagogic Framework of the University of Deusto (Competence –based learning, 2008), generic or transversal competences - **instrumental:** means or tools for obtaining a given end. **Interpersonal**: different capacities that enable people to interact well with others. **Systemic**: concerned with the comprehension of an entire set or system. They require a combination of imagination, sensibility and ability to see how the parts of the whole are interrelated.

*Table 18. Adults about assessment of learning activity and reflecting*

| Category | Subcategory | Respondents' answers |
|---|---|---|
| Learning to learn dimension | Assessment of learning activity | Four levels of assessment: the first level is my own assessment, I have my own assessment norms;<br>The second level – external assessment – starts after the social level. When they say something, we have to listen if I do it right. *There could also be a more organised level.*<br>The third level – formal – involves the qualification structure, what we have to do towards a qualification. Something very abstract what we have to do for qualification. We are judged, assessed. Very formal. The highest level is a law, assessment system, the same as not to drive through the red light [K]. |
| | Reflecting on learning activity | Learning to learn is an ability to reflect, to be reflective in each situation. On myself, on object and situation, situation that I'm in… [V]<br>Studies and reflecting with another person is superb.<br>Reflective practice is an opportunity to think while using skills, methods and abilities in every life sphere.<br>Reflecting is an opportunity to share experience, different approaches. Thus reflective practice is… stepping outside a circle and look at it from outside. That's a good exercise. Sometimes it's impossible as we don't have skills, don't have instruments. Thus it's a situation when I want to be with a person. Therefore it's important to step outside the circle and then get back in [V]<br>Getting back to yourself, looking at the situation from another perspective, maybe it didn't look right at that moment but that was reflection [K]. |

Adults highlighted the importance of assessing and reflecting on their own learning to learn, defining it as rating their activity. Research participants emphasised the importance of reflection both individually and together with other people. One of the participants highlighted the existence of certain level or stages of assessment. Respondent K indicated that the first assessor is the adult himself. Later on the process becomes more complicated and assessment is

performed by the environment. It becomes even more complicated once qualification is involved, when a person does something to get employed, to retain a job and to pursue a career. Following all the formalities set by laws, a person can get tired quite often, so an important role in the adult process of learning to learn is played by reflection. As the research participant K noted, it is important to stop on time, think everything through and then go further. More detailed thoughts on the assessment of learning to learn activity are provided in Table 18. These thoughts support the idea that there are several ways to explain and describe adult learning to learn, i.e. both formal and non-formal ways exist.

Cultural literacy refers to a learner developing the ability to value difference through understanding and respecting others' perceptions, values and needs. The challenge for the learner is to interact with others in a non-judgemental way, to see the benefits of diverse cultural input and to confront controversial issues (Cooper, Orell, Bowden, 2010, p.61).

„Social literacy encompasses the capacity to work with others, including collaboration, conflict resolution and mediation. Whilst working, adults might have the opportunity to undertake diverse team roles, including leadership...".

„The social learning opportunities are powerful when adults are required to ensure responsible, rational decision – making and balancing it with affective responses to experiences"(Cooper, Orell, Bowden, 2010, p.61).

**Generalisation.** The results of the qualitative research highlighted the importance of learning to learn in daily adult activity throughout life. The research participants' ideas confirmed that they learn to be in a group in different environments throughout their entire life. Thus the ability to learn and act in a group is important for the entire life. An important role is also given to the ability to reflect on one's learning and activity. "Coming back to oneself" and "looking into a situation from a different perspective" every time helps to evaluate one's activity all over again. Therefore, the ability to reflect on one's own learning is one of key abilities of learning to learn.

The generalisation of adult learning to learn reflective experience has highlighted different learning to learn scenarios at different periods of age, based on scientific research on the stages of human development (Jovaiša, 2012, Levinsonas, 1986 Neubert, 2006; Newman, 1997; Erikson, Beresnevičienė, 2003; Žukauskienė, 1996). Looking for common links in these authors' works and learning to learn trends highlighted in current research, the author of the dissertation has noted that each person's learning to learn scenarios are individual, influenced by biological nature and the learner's personal experience. The research has proved that discussions on learning to learn in life highlight the importance of personal features. A person gains competence at a particular age; however, they also face inevitable problems. Reflecting

on learning activity often helps to solve these problems. The research has proved that the learner's life experience and links to their profession are important in middle and late adulthood.

In early adulthood attention is drawn to organising the process of learning to learn, focusing on getting a profession, finding a job, keeping one's job and pursuing a career.

However, reviewing learning to learn at any age, adults have to adapt to each other and to constantly changing situations. The key role in this process is played by values. The research presented in this dissertation proved that adult learning to learn is a complex construct based on values, personal and professional knowledge, skills and abilities which, in such a way, enrich the learning to learn experience.

The deeper practical significance of the results are seen in Figure 63. The results are given according to the research participants' reflective experience on the development of possibilities of learning to learn, which is also important for the practical development of learning to learn scenarios, taking into consideration different age stages.

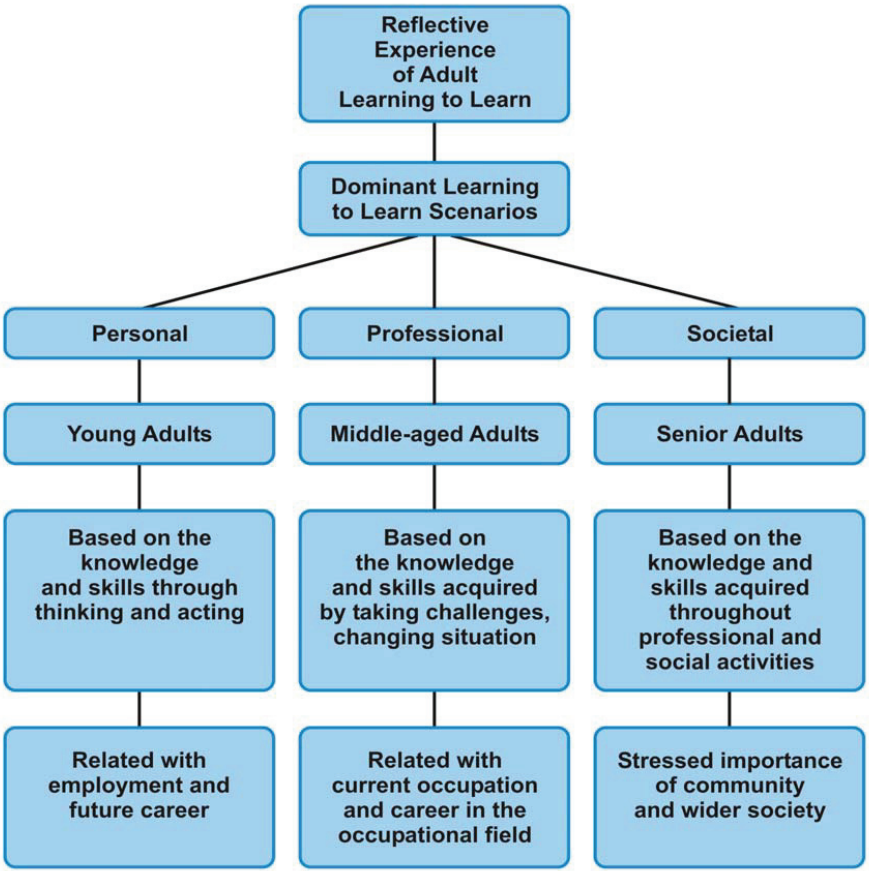



*Fig. 63. Dominant learning to learn scenarios for adults in different age groups*

In considering the reflective experience of adult learning to learn, three dominant learning to learn scenarios are mentioned: personal, professional and societal. Though these scenarios can overlap, the dominant scenarios for young, middle-aged and senior adults are highlighted in this dissertational work. The personal scenario is more dominant for young adults. This scenario is based on knowledge through thinking and acting. The professional scenario is important for middle-aged adults. It is base on knowledge and skills acquire by taking up challenges and changing situations. The societal scenario is more often used by senior adults. This scenario is based on knowledge and skills acquired throughout professional and social activities. It is important to mention that the dominant learning to learn scenarios for adults in different age groups are related to employment and future careers, current occupations and careers in the occupational fields, as well as with activities in the community and wider society.

## DISCUSSION

In order to answer the question of the dissertation, i.e. what adult learning to learn abilities are demonstrated in certain learning to learn scenarios, it has been noted that learning to learn exists independently of a learner's age. The research has revealed that seniors identified learning to learn abilities in different activities. It has also confirmed the importance of the abilities to learn and act in a group and to reflect on one's learning and activity in late adulthood. Pollard (2002) discussed reflective activity performed with colleagues and its significance. It has been noted that collaboration and dialogue with colleagues is important at any age and that collaboration and reflection related discussion is based on social learning nature which is important to adults and gives personal satisfaction (Pollard, 2002, Kohl, 1986, Nias, 1989, Vygotsky, 1978).

Research participants noted that learning to learn is a lifelong process, happening through daily activities. They emphasised learning to learn in a number of their activities. Learning is both direct and indirect.

Learning is experienced through communication with other people. This aspect has been noted to be very important for older participants who believe that other aspects of learning to learn are derived from this particular aspect.

Research respondents note that values, emotions, personal features and skills are also important in learning to learn. Positive relations among people are very important in the process of learning to learn. Social relations are an integral part of human life, improving its quality. The research has also revealed that new relations played a significant role by helping research participants to get involved in an activity and not to feel lonely. Only one participant

indicated that it is more complicated for her to collaborate with others in a group so that for the majority of time she worked independently, which is also important because one of the learning to learn abilities is the ability to learn and act independently.

In different age groups (early, middle and late adulthood) learning to learn is explained as a process unique to every individual. At different periods of age every person goes through certain learning to learn stages developing their own scenarios. Learning to learn dimensions are mentioned in scientific literature; however, the author of the dissertation discusses these authors' (Illeris, Mattoni, 2007) ideas, focusing on learning to learn trends, and highlights the importance of personalist adult ideas and pragmatic activity scenarios. Adult reflective experience has revealed that young adults apply learning to learn abilities when looking for jobs, middle-aged adults used learning to learn to retain their jobs and the elderly in late adulthood apply these abilities in social activity.

"The eight phases of learning how to learn – understood as the unlocking of learning potential – are planning, mirroring, knowing yourself, observing yourself when learning, changing frameworks, listening, transforming your believes, being playful and creative" (Mattoni, 2007).

The author of the dissertation supports these ideas, claiming that adult learning to learn is the entirety of their values, personal features, knowledge, abilities, skills and experience gained through different scenarios (process, life plan) in their life.

The research has revealed that the values of respect, honesty and responsibility for another person and life are the key aspects when reflecting on learning to learn.

Adult reflective experience on learning to learn is related to adult development tasks at different periods of age (Levinson, 1986; Merrian, Caffarella, 1999). As the research has proved, early adulthood is focused on finding a job. Professional career and civil responsibility are prioritised. Young adults also focus on finding their peer group.

Attention in middle adulthood is drawn to adult civil and social responsibilities. At this stage, adults develop and maintain the norms of economic life. Leisure activities are also important. In middle adulthood adults learn to accept and adapt to physiological changes.

In late adulthood, individuals adapt to their employment status. Besides, civil and social responsibilities are further taken into consideration. Taking into consideration one's physical

abilities, favourable life conditions are created. Adults accept and adapt to their worsening physiological strength and choose different scenarios. The research in this dissertation has proved that learning to learn scenarios are related to adult tasks, specific to particular age groups. Human individuality and their differences are emphasised.

Thus learning to learn scenarios in different age periods have both similarities and differences. These trends were revealed in the qualitative and quantitative researches of the dissertation. As Havighurst notes, the task of a young adult is to get ready for life, get a profession, find an appropriate job, get employed, and develop family life (Levinson, 1986; Johnson et all, 2000).

A middle-aged person should take on adult responsibilities; develop and maintain a particular financial life level; help children to take responsibility and be happy adults; develop adult leisure activity; communicate with a partner as a person; accept and adapt to one's age and age-related physiological changes as well as to accept and adapt to one's elderly parents.

In late adulthood (old age), individuals have to adapt to their worsening physical strength and health; to their lower incomes and pensioner life; "to accept" the loss of a wife/husband, to create peer groups; to fulfil social and civil obligations; to develop satisfactory living conditions (Johnson et all, 2000; Havighurst, 1972).

All these factors influence adult learning to learn; thus, learning to learn scenarios in the life-long context obviously depend on a number of factors and can suddenly change. The research results supported the idea that adults learn purposefully, following certain scenarios that, depending on the context, can change.

Answers to the questions raised in the dissertation, i.e. what adult learning to learn abilities influence their personal, professional and social activity and how learning could be stimulated for a person to remain a full member of their society in a constantly changing environment, are related to various challenges faced at different periods of age throughout life.

The participants responded to the question of what to do to remain full members of society: learning to learn involves different aspects that respondents would be willing to develop and improve if they had an opportunity to do this. The respondents' answers were distributed in the following way: they would like to use knowledge in practice, would like to develop planning and organising abilities, would like to use personal features, would like to develop and improve communication and cooperation, independent learning and solving learning related problems.

So, paying attention to the responses of the participants, particularly those aspects of learning to learn (such as using knowledge in practice, developing planning and organising abilities, using personal features, developing and improving communication and collaboration, independent learning, solving learning related problems) should be included into the training material and training modules for adults. The involvement of adults in activities that are meaningful for them help adults to remain full members of society.

Adult reflections on learning to learn have revealed the importance of the ability to learn and act independently in the personal development sphere and also when developing new solutions and ideas.

The ability to organise one's process of learning and activity helps to save time and energy in the professional sphere and to achieve better results.

The ability to learn and act independently is important in the pursuit of a career.

One of the key abilities when participating in social activity is the ability to learn, and act in a group by communicating and collaborating with colleagues.

The ability to discuss (reflect on) one's learning and activity helps to follow quality requirements.

The conducted research has proved that, as one of key competences, learning to learn is important in personal, professional and social adult activity. One's will to improve stimulates the development of the learning to learn competence. This is also suggested by Laurinavičiūtė (2002), who analysed motivating factors of learning to learn. Thus the results of this dissertation correlate, supplement and raise new research issues and aspects.

The author of this dissertation proposes to examine the deeper aspects of learning to learn in conjunction with the study of the biographies of the participants and his / her presence in different environments at particular periods of life. This has to be another qualitative study that will help to look even more deeply into learning to learn as a complex phenomenon.

The following trends were noted in the development of the learning to learn abilities: more research participants would like to learn individually or in a group in late adulthood rather than in middle adulthood. Young adults are those in which the largest group who would like to develop their learning to learn abilities.

Discussing with the other researchers, it should be mentioned that diagnostic research and educational activities (Lukošūnienė, 2014) show that adults want to improve the learning to learn competence and that they would like to participate in an educational activity, if it were possible.

This research highlighted the following trends in learning to learn scenarios: the importance of learning needs identification (at different age groups); participation of a person who could help learning and provide knowledge; helping others to learn and providing them knowledge; taking responsibility for one's learning; being able to learn independently; demonstrating a high level of understanding; being able to develop new ideas; and taking on long-term responsibilities.

The research results supported the idea that adults learn purposefully, following increasingly complex (life) scenarios. More participants in early adulthood than in middle or late mentioned that it is important to have a person who gives knowledge and helps one learn, which encourages one to develop the learning to learn competence.

More young adults agreed about the importance of helping others to learn and giving knowledge. The results show that for participants in late adulthood this statement is more important than for middle aged adults. The importance to determine one's learning needs and be responsible for one's learning is most significant in early adulthood, then in middle and late adulthood.

For young adults it is important to demonstrate the ability to develop new ideas and take on long-term responsibilities. A smaller number of respondents agreed about this statement in middle and late adulthood. The findings of this research and the ideas of Lukošūnienė (2014) let one make the conclusion that a deliberately planned and organized learning environment, using the experience of adults in different age stages and involving them into different activities, encourages learning so that a person can remain a full member of a constantly changing society.

The practical significance of the dissertation resides in the research participants' opinions on the possibilities to develop learning to learn, which is also important for the practical development of the learning to learn scenarios, taking into consideration different age stages.

## CONCLUSIONS

Based on the theoretical analysis and the research the following conclusions are formulated:
1. In summary, the analysis of the theoretical literature suggests that equity, social cohesion and active citizenship is a priority in the context of adult learning.
Education and training should enable all citizens to develop skills and the learning to learn competence relevant to employment, maintaining the ability to work and to continue to learn throughout life, which promotes active citizenship and intercultural dialogue. Lack of education should be reduced by using high-quality involvement in the learning process, where the conception of adult learning to learn is very important.
To facilitate the process of involvement, a construct of the competence of learning to learn is promoted, involving a broad context, emphasising the learners' ability to plan and organise the process of learning; problem solving ability; ability to reflect on their own learning and activity; ability to learn and act independently; and ability to learn in a group.
2. In this context, learning to learn is an integral part of the process of learning, focusing on the individual's ability to learn actively, organise his/her own learning (including effective time and information management), and learn and act both independently and in groups, thus forming suitable learning scenarios. The competence of learning to learn is important for the process of uniform holistic learning where adults' reflective experience is related to cognition, and the social and emotional dimensions necessary for learners' academic, social and psychological development.
In adult learning to learn, attention is drawn to the learning to learn scenarios that are unique to every learner and depend on an adult's personal characteristics, values, present knowledge, skills and abilities.
In this connection the construct of the expression of reflective experience of adult learning to learn is proposed.
3. The results of the quantitative survey confirmed that the basic dimensions of the learning to learn competence show the connection to personal, professional and social activity -
the ability to organize one's learning and activities; ability to learn and act individually; ability to learn and work in a group; the ability to solve problems and the ability to reflect on the learning activities.
The ability to organize own learning activities for adults helps achieve better results and to save time and effort in professional activities.

The ability to learn and operate individually is one of the key abilities for career advancement.
The ability to learn to operate in a group is one of the most important for participation in social activities, communication and collaboration with colleagues.
The ability to discuss and reflect on the learning activities helps to comply with quality requirements.
The ability to deal with problems helps to solve labor issues and human rights.
The ability to learn and work independently is important in the field of personal development and helps to create new solutions and ideas.
The reflective experience of adults helps reveal the variety of learning to learn. As a process, learning to learn is multi-faceted, while the skills that form learning to learn are individual and depend on the age group of the learners. Therefore the reflective experience of adult learning to learn helps reveal the many-sided process of learning to learn and differences in skills in learning to learn.
Learning to learn remains important in the context of lifelong learning in personal, professional and civic aspects in the early, middle and late adulthood:
In early adulthood, learning to learn is relevant to young adults planning their activities, especially looking for a job;
In middle adulthood, learning to learn is relevant to adults maintaining their position in the workplace;
In late adulthood, learning to learn is more associated by the elderly with their individual lives and social activities.

While identifying adult learning to learn needs, possibilities and their influence on personal, professional and social activity, the results show that the respondents believe that the learning to learn competence is very important in the following spheres: personal development, professional activity, completing work tasks, career pursuit and fulfilling civil obligations.
To generalise results, it can be noted that the importance of learning to learn is most obvious to adults in early adulthood when compared to those in middle and late adulthood. Middle-aged and older adults claimed that learning to learn is not so very important. However, certain trends of learning to learn were noted; thus it could be said that learning to learn remains important even in late adulthood.
4. When highlighting the elements of learners' learning to learn in early adulthood, it is important to mention that in early adulthood the process of the scenarios of learning to learn is important. As one of the skills of learning to learn during this process, the participants identified the ability to plan and organize their learning and activities. The study revealed that

participants, while organizing and planning activities, often mentioned the importance of communication and joint activities in collaboration with others.
Reflecting on the learning to learn of adults, their personal qualities, values and skills are important in the context of holistic learning, combining their internal psychological processes and the environment.

5. The results show that individuals are interested in developing the ability of learning independently not only in early but also in middle and late adulthood. It has to be noted that individuals in late adulthood are even more interested in learning independently than people in middle adulthood.
In early adulthood more respondents agree it is important to develop the ability to organise their own learning process than in middle and late adulthood.
The greater number of the research participants would agree to develop the ability to learn in groups, more in the early adulthood group, then accordingly in the late adulthood group and finally in the middle adulthood group.
An important issue in encouraging learning to learn in different age groups is that the development of the ability to discuss one's learning distributed by age groups as follows: the early adulthood group, the middle adulthood group and the late adulthood group.

The research revealed three distinctive scenarios of adult learning to learn based on the reflective experience of learners: the individual learning to learn scenario, the professional learning to learn scenario and the societal learning to learn scenario.

The individual learning to learn scenario is typical for young adults and is based on knowledge and skills through thinking and acting. Young people stress the importance of the planning of learning process and seek for individual goals related to employment and future careers.
The professional scenario of learning to learn is typical for the middle aged and is based on the knowledge skills acquired by taking on challenges as well as changing situations in one's life. It is most often related with one's current occupation and career in the occupational field.
The societal scenario of learning to learn is typical for senior adults and is based on the knowledge acquired in individual and group experiences throughout professional and social activities during the life span.
The importance of community and wider society for learning is stressed in this scenario.

## RECOMMENDATIONS

**1. For scholars and researchers**

The issue of learning to learn in early, middle and late adulthood, emphasizing personal, professional and social learning to learn scenarios, could be the object of deeper research. The application of new concepts would help draw all adults into a constantly changing society and remain full members of it.

**2. For specialists and practitioners in education studies**

It is important to create suitable possibilities for learning for adults, to draw attention to the major components of the learning to learn competence and different typical scenarios for learning to learn. This would help use the inner strengths of adults and the environment in a positive way, striving to help them adapt to rapidly changing surroundings.

**3. For adults in the three age groups**

The reflective experience in adult learning to learn underlined the personal, professional and social scenarios of learning to learn which strengthen and motivate adults at different periods of their life to participate in the process of learning to learn.

In early adulthood the dominant learning to learn scenario can be employed in connection with the planning of the learning process, finding a job and having a future career.

In middle adulthood the dominant learning to learn scenario can be to encourage changes in life that are linked with the sphere of professional activity, as well as by changing the situations as one encounters challenges in one's personal life.

In late adulthood the dominant social scenario can help learners to gain experience personally and in groups, to strengthen community and social meaning in the context of lifelong learning to learn.

All three scenarios help adults of different ages use their experience in the lifelong process of learning to learn, bringing together the knowledge they already have along with their skills, personal qualities and values so that they can fully enter and take part in different kinds of activities.

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Dalia STANIULEVIČIENĖ

# THE REFLECTIVE EXPERIENCE OF ADULT LEARNING TO LEARN

Doctoral Dissertation

Išleido ir spausdino – Vytauto Didžiojo universiteto bibliotekos Leidybos skyrius
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Užsakymo Nr. K14-112. Tiražas 15 egz. 2014 12 23.
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