



PRIMARY SCHOOL TEACHERS LEARNING EXPERIENCES IN CHILD- AND ADULTHOOD AND THE PEDAGOGICAL TASK OF TEACHING TO LEARN

Tünde Barabási

Abstract: One of the most important tasks of the elementary (and not only) education we can find the teaching pupils to learn. The main topic of this paper is the presentation of the effects of teacher's experiences gotten in their own learning process as students or adults on the development of children's learning strategies. As the research was made in the primary school teachers' training system the article presents the problematic along the following axis: what kind of learning methods do they use as children, what do they use as adults, and which one do they want to teach for their pupils – and the specific relationship between these elements. The results of our empirical research shows that the learning techniques and methods used in adulthood are much more oriented to a conscious and meaningful learning as in the school-ages. At the same time we find that the learning techniques and methods used by teachers determine the process of teaching to learn.

Keywords: primary school teacher's learning experiences, learning techniques and methods of adults, transmission of "how to learn"

1. Introduction

In the formal school system pupils are familiarised with a set of learning methods, techniques, strategies which he/she uses regularly in the learning process, less or more conscious. The development and frequency of use of these techniques and methods is influenced by several factor. We outline followings: the perceived models, the positive learning experiences, the educational practice and the learning expectations. Strategies used in the childhood determine significantly the information processing as adults, in motivational and technical dimension as well.

The main focus in our research is the impact of primary school teacher's learning experiences as students and as adults on the teaching to learn, on the approaches and practices in the daily educational work with their own pupils. In a first step we take into account the importance of the development of learning abilities and techniques from the early ages of the primary school pupil and its theoretical possibilities, after that we present the results from our survey realised among primary school teachers, in order to get information about their judgment regarding the learning techniques used as students, as adult learners, and their effect on the educational practice.

2. Theoretical background

In school-age pupils learning activity and its efficiency is conditioned by several factors. One of these is in relation with the used learning techniques and methods, with the consciousness of their selection and adaptation to the material to be learnt. Between the elements that influence the formation and application of the learning methods and techniques we can find also the perceived models, the positive learning experiences, the pedagogical practice and expectation system. Learning strategies developed in childhood have a big influence on the learning activity in adulthood, not only in motivational but also in its technical dimension.

Adult learner's characteristics and their consequences on adult education and learning

Adult learners are also students, but they have a lot of features due to which they are other than school-aged pupils. In the inventory of the characteristics of adult's learning we must also be aware that a part of these are determined by their adult status (mostly those which are related to the time, organization and attitudinal needs), but another part are hanging up from the personal previous learning experiences (mostly those which are related to the learning techniques, methods and sense of achievement). All adults arrive in the learning situation with a variety and range of experiences: in terms of work experience and educational, learning habit and experiences as well. This fact impacts their participation into the learning process.

According to Wynne (2012) adult learners present some common characteristics. We select from them those which affect directly or indirectly their learning efficiency:

Adults come to courses with experiences and knowledge in diverse areas. They tend to favor practical learning activities that enable them to draw on their prior skills and knowledge. Adults are realistic and have insights about what is likely to work and what is not.

Adults have established opinions, values and beliefs which have been built up over time and arrived at following experience of families, relationships, education and learning, work, community, politics, etc.

Adults are intrinsically motivated. Learners increase their effort when motivated by a need, an interest, or a desire to learn. They are also motivated by the relevance of the material to be addressed and learn better when material is related to their own needs and interests.

Individual differences. Adults learn at various rates and in different ways according to their intellectual ability, educational level, personality and cognitive learning styles.

Adults learn best in a participatory and collaborative environment.

Adults are goal oriented / relevancy oriented. They are task or problem-centered rather than subject-centered.

Adults are autonomous and self-directed. Individuals learn best when they are ready to learn and when they have identified their own learning needs.

Adults are practical and problem-solvers. Problem based learning exercises are welcomed as they build on prior experience and provide opportunity for practical application of materials/theories covered.

Adults may have insufficient confidence. Some may have had poor prior experiences of education leading to feelings of inadequacy and fear of study and failure.

Adults' education generally, their learning activity especially must be fitted to these characteristics because they affect also their own learning process. (Its possibilities were examined by Trivette, Dunst, Hamby & O'Herin, 2009) The individual variation of these features, as well as their prior educational and learning experiences determines the ways how adult's teachers can facilitate the development of knowledge and understandings. The organization of adults' learning process with the consciousness of these learning particularities may decrease the percent of students, who drop out adult education programs (which may reach 70% of the adult learners enrolled in different courses - according to Park and Choi, 2009). Let's see the variables which affect the effectiveness of adults' learning and lead to the prevention of the drop out phenomenon.

Learning techniques and methods as factors of effective learning as adults

Conlan, Grabowski & Smith (2012) mention several variables which affect the learning experience of adults:

- Life experience (including life altering events that affect cognitive abilities)
- Work experience (including development of thinking patterns based on this experience)
- Positive/negative previous adult learning experiences

- Performance affectors, including cognitive abilities
- Time between learning interactions
- Aging factors

Park and Choi (2009) identify in their study some factors, which affect adult learners in their learning process. These include learner's characteristics (age, gender, education, employment status), external factors as scheduling conflicts, family issues, financial problems, managerial support, personal issues, and internal factors as social integration academic integration, technical usability issues, motivation. Authors mention also the learner skills, which can be understood also as cognitive, learning skills, also practical skills. The question is how developed are adults learning skills and closely related, their learning methods and techniques.

As we could observe, that adult's previous learning experiences have a big impact on the learning activity in this stage of life, we consider that the analyses have to start from the learning experiences gained in school-age.

In this order we have find, that the general negative connotation of the learning activity, the poor learning performance in school is caused by the fact that pupils don't have developed abilities of using learning techniques, they don't recognise its importance, don't know how to use them in various learning situations (Lappints, 2002). In the pedagogical literature we can meet this opinion frequently (see also Balogh, 1998). Mezo (2004) synthesises those views which emphasises on the urgency of familiarising pupils with learning methods, techniques, strategies. Authors like Barkóczy – Putnoky (1967), Coombs (1971), Kiss (1973), Skinner (1973) had formulated with decades earlier the imperative of the effective learning techniques development as a basic requirement of a performing educational process. This expectation today is more actually than ever. Our research data also prove that adult learners rarely report about conscious learning-techniques use in their childhood.

That's why we consider to be important the examination of the possibilities through which we can contribute to the effective forming of the learning process. In this order, we analyse the interpretation possibilities of the learning development. Students often do not mention that they don't learn effectively. They have the impression, that they understand the learning contents, so they do not search for alternative understanding methods, the reflection possibilities, the way of the efficient analyses (Glenberg, Wilkinson, Epstein, in Rozgonyiné, 2010). In contrast, adult learners - as a characteristic of their learning activity to emphasise on the pragmatic dimension of the learning process – are aware of the efficiency of their learning activity very early, and also of the importance of the learning developing process.

According to Balogh (1998) there are two ways of the development of the learning activity:

Direct development: in this process we familiarise the students with those learning techniques which are unknown for them. These techniques will be built in their learning activity and serve as base for forming adequate strategies, more efficient than the previous ones, and which are in better concordance with the learning contents.

Indirect development: its meaning is that we do not develop the missed strategies, only complement those psychical "conditions" which are indispensable for the efficient applying of the learning strategies (memory, attention, thinking, motivation, etc.). So, we develop those intellectual abilities and psychical systems which basically influence the whole learning process, so the application of the learning strategies as well.

The similar realisation of these two ways of the development is not only possible but also desirable, as the two factor-categories determine the learning process interconnected.

The direct development can be assured through the use of teaching methods and strategies in accordance with adults learners needs as: lecture, problem-based learning, case studies, educational games, role play, and discussion (Ota, DiCarlo, Burts, Laird & Gioe, 2006) which serve as models also for the autonomous learning activity.

3. Research

Objectives

The main objective of the research is the examination of the consciousness of learning process and the capacity of using adequate learning methods and techniques by those adult learners, who would like to become primary school teachers, or who are practicing primary school teachers. To know how to learn is doubly important for those students, adult learners who would like to become teachers in the primary school, in one hand, because it can bring the optimisation of their own learning activity, in the other hand, because in long term it determines the responsibility of the teaching to learn of their future pupils.

In order to reach our aims, we would like to answer questions as: What kind of learning strategies do adult learners use? Are these methods determined by prior learning experiences and at what extension? How do adult learners interpret the impact of their adult status on their own learning characteristics? What does it mean for them the pedagogical task of teaching to learn and if they believe in their own influence opportunities on pupils learning methods and techniques? Which learning methods and techniques do they consider to be the most important to develop in primary school?

As a yield of the answers to these questions, we would like to gather empirical data concerning the need of those adult learners, who follow primary school teacher's training system in order to optimize their professional building and facilitate their effective learning activity as well.

Our main hypothesis is that adult learners in the development of their learning techniques, methods and strategies are based mostly on their prior learning experiences (even if these are positive or negative) and the modification occurred during learning as adult are not significant. We also suppose that variations of the used techniques are determined by the adult learner's characteristics and the features of the learning situation as adults.

Methods and materials

In our survey, as target population, we have involved students from the distance education system, who have gotten once a graduation at high school level as primary school teachers, but they would like to get it on university level too. That means that most of them are practising teachers (66%). Another important feature of the sample is, that their learning activity can be characterised as one of the adult learners. Altogether we involved 211 subjects, who filled the questionnaires regarding the experiences of their learning specifics as children and adults, and also the judgment of their role and possibilities in forming their pupils learning activity.

We have gathered data for quantitative analyses by survey, using a self-elaborated questionnaire. This survey questionnaire consisted of demographic data and variations of question (closed and opened as well) mentioned at the description of the objectives.

Results

The interviewed teachers, reflecting on their own learning activity, report that during the school ages they construct and consolidate a learning strategy (with 3,8 average on a scale from 1 to 5). But they also showed, that this strategy is going to be modified during the adult learning process, on average 3,7 on the same scale.

We can argument the high value of the modification through the features of the learning process as adults, which tend to be more goal-oriented, conscious, motivated and economic. Detailing contently this modification of the learning activity, we have asked the subjects of our survey to range in a scale different learning techniques from the point of view of their frequency in the learning activity also as pupils, and as adult learners. The results shows that the learning techniques applied as adults are more various and conscious. In the school-age two techniques are dominant: *reading loud the content to be learnt* and *telling another person*. These techniques are significantly more often used as pupils ($t=5,229/ p=0,000$; $t=1,953/ p=0,05$) The fact that these techniques do not disappear totally outlines that adult learners do not exclude the use of this methods – mostly those with auditory or social

learning style. We can otherwise make also another interpretation: those learning techniques which are frequently used in the school-ages have a bounding effect also in the adult learning. The empirical data showed that these techniques appear more markedly closed after the school-ages, and the “older” adult learners are much more able to use other more efficient methods in their learning activity.

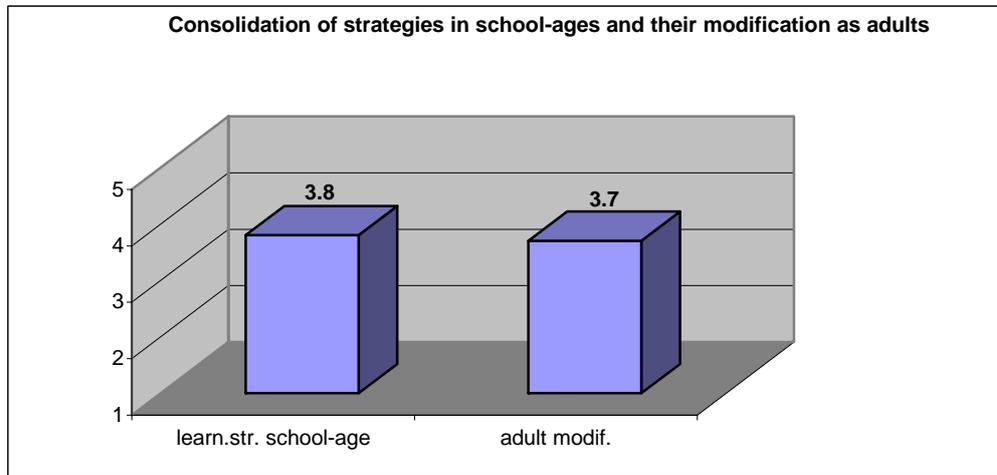


Figure1. Consolidation of learning strategies in school-ages and their modification as adults

The surveyed subjects also formulated their opinion concerning the differences between the learning activities in the school-age and as adults. After the categorisation of the data occurred through open-questions we have gotten following findings:

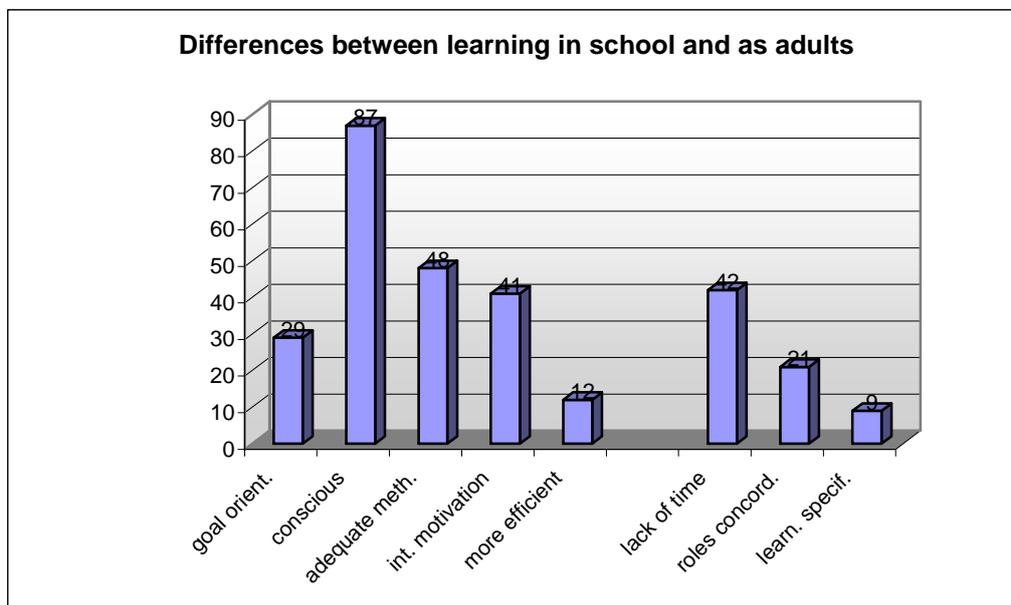


Figure2. Differences between learning characteristics in the school ages and as adults

We can read from the diagram that the vast majority of the subjects consider the learning activity in adulthood to be aware, based on a logical cognitive process, goal-oriented, conducted by internal motivation, in which a major role has the application of the adequate learning methods and techniques, on which the efficiency lies. We quote from the most exemplary answers: “There is a difference, because I haven’t had knowledge about learning methods and techniques, but now I have, and the

most effective for myself I use regularly.”; “In the school-ages we have learnt the content in the way, how the teachers have thought us. Now we search the most important information, focus on them and try to build in our knowledge system.”

We also find differences which are negative more for the learning activity as adults. In the top of the disadvantages list is the lack of time, completed with the challenge of social roles concordance experienced by the subjects as gaps of an efficient learning activity as adults.

We can summarise that the differences between the learning activity - in the analysed categories - are significantly positive in the favour of the adult learning according to the majority (91,5%) of the surveyed subjects.

In the interpretation of the causes of the differences we have looked also for the negative and positive reasons.

The differences are positive from the point of view of the adult learning, because:

It has expanded my repertoire of learning techniques and methods

I have gotten sophisticated learning strategies

My learning abilities became more developed

My learning activity is much more goal-oriented

We highlight from these answers that adult learners perceive that the expansion of the repertoire of learning techniques and methods and their adequate use is one of the most important conditions of an efficient learning activity.

In the line of negative changes we have find following opinions:

The differences are negative from the point of view of the adult learning, because:

I have less time to learn

The whole learning activity is different

My learning abilities “function” less efficient

I don’t know learning methods typically for adult learning

From these answers surprising is the last one. In our interpretation the surveyed subject who mentioned it wanted to underline the insufficient capacity of the appropriate use of these knowledge.

To learn how to learn nowadays is a social requirement from the primary school. Understanding and feeling the responsibility of this fact subjects marked with very high average (4,48) as one of the basic task of the teacher to teach children how to learn. On the interpretation of this duty we can observe tonal variations. In the questionnaire we gave several answer versions as follows:

To point out the learning methods and techniques, to direct the selection of the adequate methods and to support their application.

To point out the learning methods and techniques, entrusted to them the selection.

I have to concentrate on the results from the learning and not on the process.

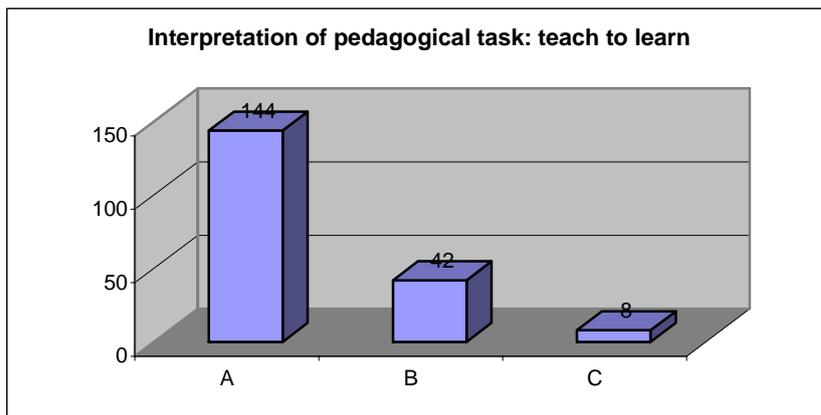


Figure3. Interpretation of the pedagogical task: teach to learn

The results are interesting if we analyse teacher’s developmental approach. It is unequivocal that they choose the “to point out the learning methods and techniques, to direct the selection of the adequate methods and to support their application” task to be the most important. Those, who have selected the “to point out the learning methods and techniques, entrusted to them the selection” think, that the pupil can choose those methods and techniques which are the most suitable for themselves. We highlight, that children need – at least at the beginning of the learning process - to be directed and helped during the application with a supporting attitude. This doesn’t mean that we want to exclude the individual decision making and responsibility for the effectiveness of the own learning activity and results.

It is an interesting finding of our research that while subjects regards the development of methods, techniques, strategies one of the most important pedagogical task, they are much more low-keyed in judging their own roles and influence possibilities in directing pupils adequate and various learning techniques application. It’s average value is 3,9. We show the differences in Figure 4:

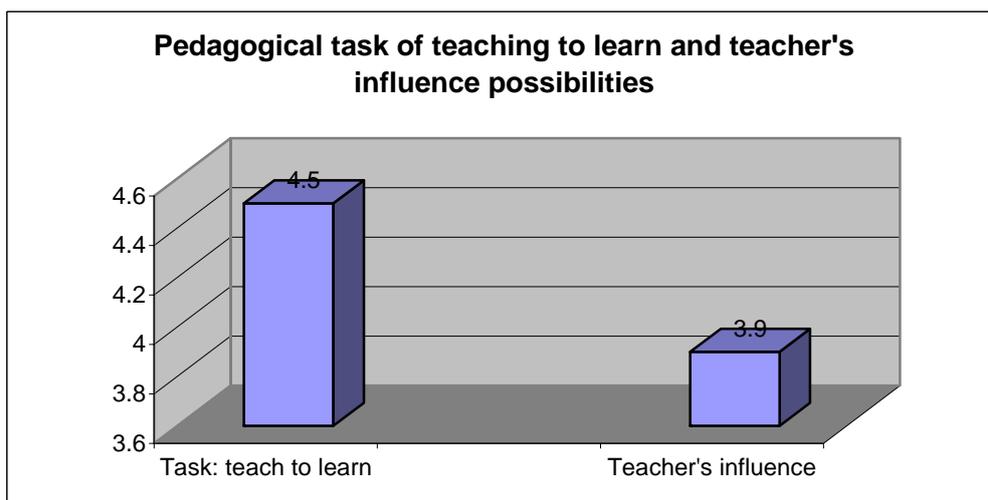


Figure4. The pedagogical task of teaching to learn and teacher’s influence possibilities

The question which focuses on the examination of teacher’s learning techniques influence, gave the possibility for subjects to choose one of the following answers:

My learning techniques do not influence what I want to teach to my pupils

I stimulate them to use methods and techniques effective for myself when I was school-aged

I stimulate them to use methods and techniques effective for myself as adult learner

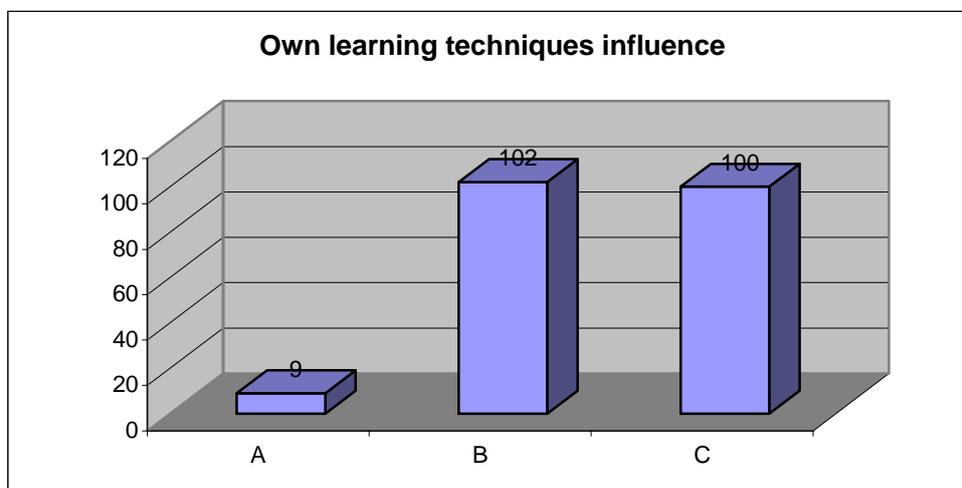


Figure 5. Influence-variations of teacher's own learning techniques

It is observable on the diagram that the learning technique's influence is equilibrated between those used as students and as adults. Our expectation was that it will be better represented the C answer variation, as a few question earlier subjects had mentioned adults learning techniques more efficacy. We explain this phenomenon to be an effect of practitioner teacher's experience that primary school children are not able to use some of the adults learning techniques according to their developmental features. Altogether we have seen that teacher's own learning experiences have a major influence on their educational practice (with an average value of 4,15 on a scale from 1 to 5), as they set in foreground those teaching methods, which facilitate the applying of learning methods and techniques putative to be efficient.

Concluding those learning methods, techniques and strategies thought to be at all event formed in the primary school-age we have gotten following diagram:

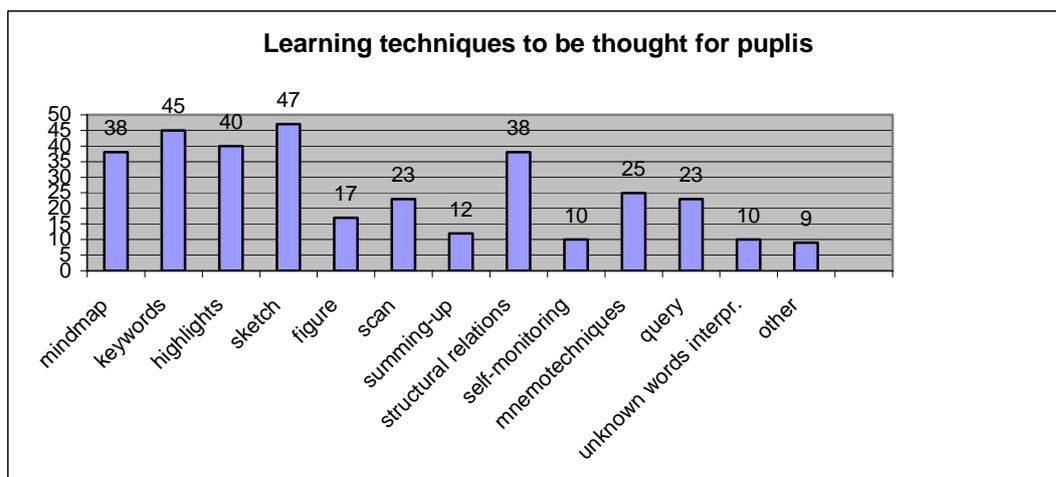


Figure 6. Learning techniques proposed to be thought at primary level

We can observe that there are mostly those techniques and methods which are formable in the primary school and in the same time make possible a meaningful learning: sketching, searching keywords, exploring structural relations, mind-mapping. It is also promising that teachers see development of using abilities from these techniques as their pedagogical task, as this will make possible for the students to use and improve and further develop them at a higher level of study.

In a last question we ask subjects judgement concerning the role of the *Efficient Learning Techniques* (ELT) discipline from the primary school teacher's curricula in their own learning development and the efficacy guidance of their pupils learning activity.

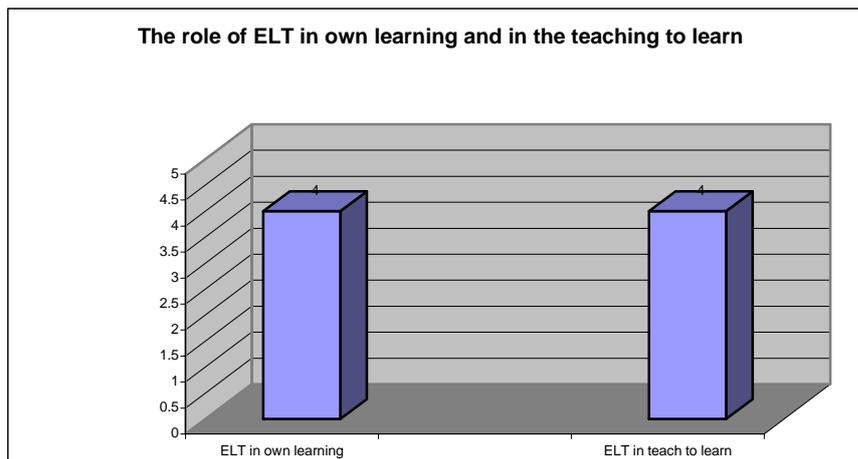


Figure 7. The role of discipline *Efficient Learning Techniques* in own learning activity and in fulfilling task of teaching to learn

The average value is high in judgement of both questions. This fact shows that to pay attention at institutional level to the efficient learning techniques is justifiable. The sameness of the values underline one of our earlier findings, that the effectiveness of teacher's own learning activity and the development of pupils learning activity are going hand-in-hand, and are in interdependence.

Discussion

The extent to which the characteristics of adults learning process can be associated with learning features of in- or on-service primary school teachers was one of the focuses of the research synthesis presented in this paper. Findings described in the theoretical background regarding adults learners characteristics (Wynne, 2012; Conlan, Grabowski & Smith, 2012) were underlined by our empirical research results also, mostly in terms of features of adult learning activity within the whole adult education specificity.

The role of previous learning experience, was highlighted by Conlan, Grabowski & Smith (2012) and also Park & Choi (2009). Our findings are not contradictory with these opinions, but more nuanced, as the results show, that the learning strategies and methods receive the features of adults learning even if it makes necessary a deep modification of the strategies developed in school-ages (the modification average value is 3,7 on a scale form 1 to 5). Deeper content analyses of the modification can be the topic of a following research, as our findings suggest, that those techniques will be eliminated from the strategies, which are not compatible with the adult learners needs. As these can be described in terms of consciousness, goal-orientation, intrinsic motivation etc., it is desirable to develop them from the school-age, facilitating in this way the learning process in adulthood.

Conclusions

The adult learning activity – which's crucial point is the use of adequate learning methods and techniques - of teacher's is going to be overestimated as it influence not only the own performance, but also the knowledge construction process of their pupils. The results lead us to the conclusion that the primary school teacher's training system has to be adjusted in many perspectives to the features of adult education in order to insure a successful learning. The success in adult learning, the realisation of an efficient self-regulated learning activity has not only high motivational effect, but also a beneficent effect on the organisation of their pupil learning activity.

As regarding our hypothesis our supposition was partly validated. That means that the development of adult learners learning techniques, methods and strategies are really based on their prior learning experiences or at least influenced by them but we could observe an important modification of the learning process as adults. This modification is the result of the impact of adult learner's characteristics and the features of the learning situation as adults.

In primary school teacher's in- and on-training system it would be benefic to familiarize students with modalities of development of learning techniques and strategies that are effective useable as adult learners also, as they make possible an intrinsic motivated, conscious and goal-oriented learning activity.

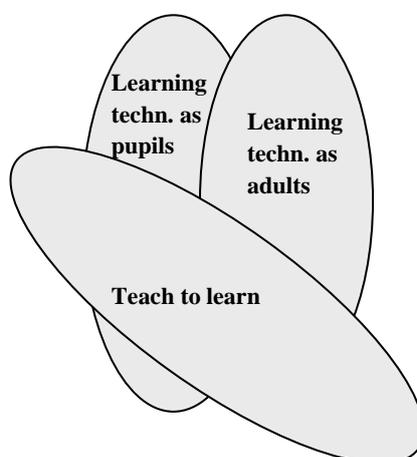


Figure 8. Determinative relations between teacher's learning techniques and teaching activity

As final thoughts, reflecting to the research problem and the empirical results as a whole we can set up following continuum: *school-ages learning strategies* are significantly changed in the adult learning activities in the benefit of a meaningful and conscious learning. It means that it would be desirable to stimulate pupils learning activity in this direction and to consolidate such learning habits, which need during the *adult learning* only supplement but not completely changed. Primary school teacher's efficient learning activity have a major effect on their pupils learning, namely on the *teaching to learn process*.

References:

- [1] Balogh L. (1998). *Tanulási stratégiák és stílusok, a fejlesztés pszichológiai alapjai*. Kossuth Egyetemi Kiadó, Debrecen
- [2] Barabási T. (2009). *Érdemes tanítóként továbbtanulni Romániában? Avagy tanítók a felső- és felnőttoktatási rendszerben*. Erdélyi Pszichológiai Szemle 1, 83-119
- [3] Conlan, J., Grabowski, S. & Smith, K. (2012). *Adult learning*. Review of Adult Learning, downloaded from: http://projects.coe.uga.edu/epltt/index.php?title=Adult_Learning#Variables_Affecting_Adult_Learning (06.11.2012)
- [4] Lappints Á. (2002). *Tanuláspedagógia*. Comenius BT., Pécs

- [5] Mező F. (2004). *A tanulási stratégiája*. Pedellus KK, Debrecen
- [6] Ota, C., DiCarlo, C.F., Burts, D.C., Laird, R. & Gioe, C. (2006). *Training and the Needs of Adult Learners*. Journal of Extension 6 (44). <http://www.joe.org/joe/2006december/tt5.php> (05.11.2012)
- [7] Park, J.-H., & Choi, H.J. (2009). *Factors Influencing Adult Learners' Decision to Drop Out or Persist in Online Learning*. Educational Technology & Society, 12 (4), 207-217
- [8] Rozgonyi T.V.É. (2010). *Önszabályozó tanulás*. Krúdy Könyvkiadó, Nyíregyháza
- [9] Trivette, C.M., Dunst, C.J., Hamby, D.W., & O'Herin, C.E. (2009): *Characteristics and Consequences of Adult Learning Methods and Strategies*. Research Brief Volume, 1 (3), downloaded from: http://tnt.asu.edu/files/AdultLearning_rev7-04-09.pdf (06.11.2012)
- [10] Wynne, R. (2012). *Characteristics of Adult Learners*. Lerner Centered Methodologies, downloaded from: http://www.assetproject.info/learner_methodologies/before/characteristics.htm (05.11.2012)

Author

Tünde Barabási, Babeş-Bolyai University, Odorheiu Secuiesc (Romania). E-mail: tunde.barabasi@gmail.com

