

The acquisition of primary school pupils' life activity skills in the aspect of teaching content of home economics and technologies

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Abstract The study of Home Economics and Technologies is a significant study subject where pupils' knowledge, working skills and attitudes are developed which is the basis for the acquisition of pupils' life activity skills. It is essential to link the learning experience with the real world of work. The choice and topicality of the research theme was determined by the observed contradiction in contemporary study of Home Economics and Technologies between students' (future primary school teachers) handicraft skills not mastered at school and the possibilities to acquire the methodology of the study of Home Economics and Technologies as well as between the pupils' self-organization and self-discipline skills and the acquisition of the study content of Home Economics and Technologies from the perspective of life activity. During the research we explored the prerequisites for the acquisition of life activity skills for primary school pupils in the study of Home Economics and Technologies.

Keywords: the study of Home Economics and Technologies, life activity, primary school.

Introduction

The subject of Home Economics and Technologies (needlework, handicrafts, housekeeping) has changed as a result of different school reforms and has always kept educators' thoughts (Žukovs, 1987). School reforms underline the significance of needlework, handicrafts, and mentoring in the development of harmonious personality, in the identification of values; however, its ways and methods of implementation into practice are still searching for solutions. Modern, scientifically based recommendations for the implementation of the study of Home Economics and Technologies into practice have not been developed yet, which would facilitate every pupil's readiness for a life activity.

The study of Home Economics and Technologies is an important subject where pupils build knowledge, skills and attitudes, which is the basis for the acquisition of pupils' life activity skills. Therefore in the study of Home Economics and Technologies there is the important content which corresponds to the pupils' needs, interests, abilities.

Nowadays the European Commission evaluation report has stated that the European education and training system is still unable to provide skills to guarantee employment, and it does not approximate learning experience to the real working life (European Commission ..., 2012).

The choice of the research subject and its topicality was also determined by the contemporary contradictions in the study of Home Economics and Technologies between:

- students' (future teachers of primary schools) unrealized handicraft skills at school and learning opportunities of Home Economics and Technologies training methodology,
- pupils' self-organization, self-discipline skills and the acquisition of Home Economics and Technologies content within the aspect of life activity,
- the study task of Home Economics and Technologies – to acquire the basic skills of self and surroundings maintenance, the healthy diet choices, cooking and their implementation into practice (Mājturība un tehnoloģijas ..., 2008).

Contemporary educational tasks, including the study of Home Economics and Technologies, are supposed to help learning the skills that are needed in different areas of life: work, school, private, and public life. Hence the question regarding the acquisition of the pupils' work skills within the aspect of readiness for life activity has become topical.

Aim of the Study

To explore and analyze the acquisition of primary school pupils' life activity skills in the aspect of the study content of Home Economics and Technologies and to discover acquisition conditions of pupils' life activity skills.

Methodology

The research has used: a theoretical method - literature analysis, document analysis; empirical methods – interviews, observation and practical experience analysis; mathematical processing of data.

The research was carried out in the practice schools of Riga Teacher Training and Educational Management Academy, Cambodia's primary school (in a rural area), and one of Sweden's primary schools.

Results and discussion

In the historical times, primitive people made themselves clothing from animal skins and fibres of plants. The need to decorate these garments also appeared. In Kurzeme and Vidzeme during the reign of Duke Jacob Latvians wore self-made clothes and self-made footwear (Grīns, 1931, 5-6).

Over the time, the human mind, taste, hand dexterity is developed. More knowledge and experience in carrying out various kinds of work appear. By adding to its wisdom of life, the next generation gets even a richer stock of knowledge. A. and A. Dzērvīši indicate that a Latvian woman in ancient times constantly had to deal in daily life with all necessary preparation of handicraft and fabric, and that parents took an effort for their children to obtain this accumulated wisdom of life. The landladies spun, wove, stitched, knitted and mended everything that their families needed. In addition to farming, rural residents were engaged in several dozens of crafts and sometimes also domestic industry. Children living in such an environment gained the knowledge in a self-taught way, acquired skills in various types of handicrafts (Dzērvīši, 1937, 6).

Life activity, according to A. Špona, has been developed within the process of cognition and transformation of the person himself, the society and nature in the system of techniques and attitudes of the individual's activity implementation and meeting one's needs (Špona, 2006). In their turn, E. Volāne and A. Špons define life activity *skills* as the ability to make objective decisions and the ability to operate on the basis of the knowledge and attitudes (Volāne, Špons, 2010).

Following the handicraft training, as the A. and A. Dzērvīši indicate, then some training methodology was also used at the time when there were no schools. When herding the cattle, girls acquired the skills to make narrow, braided garters, simple knits. However, very little girls, in a semi-serious, semi-playful way exercised their patience and endurance by rolling yarn balls, tearing the wool and even spinning coarse threads. In their turn, the boys when herding made simple wooden boxes, carved wooden spoons, made reed-pipes (Dzērvīši, 1937, 7). Thus, by switching imperceptibly from easy to more complex works, children were guided into the serious work and life. The first practical works became the basis for skills acquisition which was important in life activity.

A question about the importance of crafts in the acquisition process is topical not only in Latvia, but also in other countries. The French philosopher, enlightener Jean Antoine Condorcet indicates that the four-year primary school includes the introduction to farm work and acquisition of crafts, which helps a child prepare for life (Шабаева, 1981, 62). This idea is continued by Robert Owen, emphasizing that in the primary school boys need to learn crafts, gardening, but girls - sewing, cooking, and other farm works (Шабаева, 1981, 98). In Russia, as well as around the world, work was considered to be one of the most important elements of learning that children can be tested in the activity and the process of work. Women handicraft lessons are mentioned in the educational literature most often, which took place both in monasteries and in seminaries (Шабаева, 1981, 3).

Handicraft training system in Latvia is connected with the name of K. Cīrulis. In the creation of handicrafts system K. Cīrulis uses and further develops cognitions formulated by Neo-Latvians (Auseklis, A. Kronvalds, K. Valdemārs, J. Alunāns, etc.) regarding the approximation of the school

curriculum to daily life, according to the economic and social requirements of the epoch. Auseklis's opinion is important that the process of upbringing, which starts in early childhood, has to be continued at school systematically and without interruption. The teacher's task is to succeed that work becomes a habit for children (Auseklis, 1923, 463).

K.Čirulis emphasizes the idea that it is necessary to prepare children for life, to create aesthetic taste, stimulate the imagination. Perhaps therefore in the handicrafts study content he recommends not to be limited to knitting, sewing, embroidery and darning, but also to include other types of work such as washing, ironing, and lessons in the kitchen, in the garden and the vegetable garden (Цируль, 1894, 166). It encourages a more diverse formation of working skills. K.Čirulis emphasizes a teacher's performance as a significant factor in the handicraft training. His views correspond to F.A. Distervegs' cognition that the teacher's strength is in his method (Цируль, 1894, 163). K.Čirulis's cognitions are important in the creation of a handicrafts teacher's model explaining that a handicrafts teacher needs to feel the willingness to work, to feel the obligation to nurture the love of work, to be intellectual and to remember that handicrafts are a means to achieve the goal (for personal development).

Handicrafts, as K.Čirulis admits, only then will contribute to the upbringing, if their contents, organizational forms, methods of work will comply with the children's powers, interests, will promote the amateur art (Цируль, 1894, 166).

In turn, the handicraft training tasks given in "The Handicrafts Curriculum of Folk High Schools" correspond to the pedagogical cognitions published at that time to satisfy children's predisposition for acting and movement, to develop the child's ability of observation and comparison, artistic taste, to nurture in the children the joy of work, initiative and confidence in their own abilities, to show children how to use geometry, calculation, drawing and other real knowledge in practical life and to familiarize children with the qualities of materials and tools and their uses, which have a major role in their later life, to develop the child physically (Tautskolu rokdarbu ..., 1925, 4).

A.Panteļejevs' cognition is significant that the work skills formation process, the results of the work, as well as the recognition of the well done work are important in the teaching process. The recommendation is essential that at handicrafts children do not have to be taught just to make various items by setting it as the ultimate objective, but rather to nurture them *at work* and *with work* (Panteļejevs, 1936, 3). Also, the formation of habits regulations has not been forgotten yet, which was considered to be important at the end of the 19th century by K.Čirulis and by educators at the beginning of the 20th century.

A. Panteļejevs emphasizes that practical work is also one of the most serious subjects that require a great consumption of energy and interest from a teacher. Additional energy of the teacher is also required by the suggestion nominated in the curriculum for *self-control*, *self-analysis* promotion. Not only independent work becomes significant at handicraft lessons, but also the ability to use at work the knowledge and skills acquired in other subjects. There is a significant recommendation to pay a particular attention to the ability of making items that are similar in structure and role to the already manufactured, thus using their work experience (Panteļejevs, 1936).

When analyzing the handicraft study experience at the time of the Soviet school we may conclude that, compared with 1920s-1940s there are significant changes felt in the handicraft training. Relatively frequent changes in requirements for teaching handicrafts are affected by various Governmental and the CPSU decisions regarding the improvement of school performance.

On the basis of the principal tasks, research of the Soviet school, the handicraft study content, methodology, organizational forms of work in primary schools are developed and improved. The study content includes works that prepare students for life activity – it includes agricultural work, working in the fields, cleaning the school and its premises, clothing care, as well as plans to acquire basic skills in cooking as well. At a certain period of time handicraft content includes working with wood, with plywood and cardboard to simpler work in sawing, nailing, planing, painting, which provides gradual acquisition of practical work skills. It takes into account the pupils' age, gender and the educational content includes modelling, technical works, as well as electrical engineering.

A. Feldmanis indicates that at practical work lessons, in the field work school patch, works are to be carried out both individually and collectively (Feldmanis, 1960, 8). L. Žukovs also believes that the younger school-age children must be involved in self-service so that they develop in themselves socially significant motives of activity. Pupils need such conditions so that they feel encouraged by the fact that with their work they provide other people with enjoyment and benefit (Kopeloviča, Žukovs, 1989, 10). It should be noted that a collective work type in handicraft training is mentioned for the first time because in 1920s-1940s the individual or group work was mostly emphasized. Thinking about the readiness for the life activity, L. Žukovs especially emphasizes the opportunities for boys to acquire mending and sewing skills (Žukovs, 1987, 74).

Interesting research was carried out in Russia. Its aim was to explore the nature of handicraft training at schools in capitalist countries (also at primary schools). It was a comprehensive research because primary schools from 27 countries were involved. Teaching goals for the significance of a practical activity are related to preparation for life (in the USA, France), to the practical applicability of the products (in Brazil, South Africa, Thailand), to assistance in the choice of profession (in Italy, Chile), etc. There are several surprising research results – in all countries a huge number of lessons is allocated to handicrafts. In several countries (in Egypt, France, Italy, New Zealand, Switzerland, Uruguay) boys learn the skills to work with technical equipment and use materials that are readily available - a variety of industrial leftovers. It is interesting that teachers without special education teach only in some countries (*Ручной труд ...*, 1955, 4-23).

The main benefit is high variety of handicraft training goals and objectives in the world, which confirmed the idea, that handicraft study content was developed *in accordance with the needs of life* in relation to the real things and phenomena that are approximated to life. In Latvia and the world there are common trends in the acquisition of Home Economics and Handicraft Technologies, including pupils' skills development for readiness of life activity in the aspect of personality development.

Nowadays the primary school Home Economics and Technologies training content includes knowledge and understanding about human lifestyle, i.e. housing, security, housework scheduling, diet, clothing, so that pupils would shape not only the concept and initial skills at the handicrafts for health maintenance, but also to create a positive attitude towards the environment, society and public health as a value. The second section of the teaching content is equally important – practical and creative application of technologies for the improvement of human living environment (product ideas, creation of conception and design, projecting, manufacturing of the item from textile products, paper, cardboard and natural materials, building materials, wood and wire. A relevant part in the acquisition of life activity skills is given to the work process and product evaluation, which is also one of the sections of Home Economics and Technologies study content (*Mājturība un tehnoloģijas ...*, 2008).

In order to see the acquisition of important skills for pupils' life activity, we continued the research that was started in 2005, 2007 together with the students from Riga Teacher Training and Educational Management Academy at the practice in primary schools (Volāne, 2008). In 2013, the research enrolled 954 primary school pupils. Whereas the European Commission education evaluation report indicates that there is still a high demand for skills related to science, technology, engineering and mathematics (European Commission ..., 2012), then continued exploring the pupils' ability to measure and to construct in accordance with the given sizes. It is to admit that measuring skills for pupils are necessary in several subjects and in the further life activity as well, especially in engineering, mathematics. The results were compiled in a table (Table 1).

In accordance with the compiled results it can be concluded that there is a higher percentage of such pupils (32 %) in form 3 who are not capable of constructing the figure according to given measurements. In comparison with the results of 2007, the results collected from the pupils of form 3 cause reflections. In recent years, the pupils' skills to measure, cut and construct have declined. One of the reasons is the reduced number of lessons for practical work, i.e. one lesson (40 minutes) a week. In the course of the research it was observed that pupils lack the patience, they rush to get faster results. In particular, it was noticed that in form 3 pupils have already grown superficiality as a character trait, which was formed for 3 years.

Table 1

Pupils' ability to design and measure in accordance with the given sizes

Form	Accurately		Inaccurately, with insignificant slips		Designed figure does not correspond to the given sizes	
	2007	2013	2007	2013	2007	2013
1.	72%	69%	10%	12%	18%	19%
2.	69%	54%	22%	17%	19%	29%
3.	78%	48%	9%	20%	13%	32%



In the research of 2013 it was observed that pupils had better acquired the skill to measure and construct in those forms where the number of pupils is less than 30, as well as in the forms where teachers in the training process provide the time for pupils' self-assessment in relation to the specific task conditions, evaluation criteria.

After discussions with the teachers we had the approval of our assumption that the superficiality of pupils is due to the reduced number of lessons (1 lesson weekly) for the acquisition of skills of Home Economics and Technologies. A. Dauge's cognition is significant that acquisition of handicraft technique has also an educational role that undeniably affects the character's upbringing, creates patience, precision and attention (Dauge, 1924, 90), which is essential to the acquisition of pupils' life activity skills.

It is nice that recently most teachers are looking for new assignments and tasks in collaboration with pupils so that it would be pleasant and interesting to work. In practice, we were convinced that pupils are bound by a practical activity which leads to the pupils' interest, such as acquiring the skills to cook salad (Table 2).

Table 2

Acquisition of pupils' life activity skills in Latvia

No.	Characteristics of the acquisition of nutritional education skills	Characteristics of the acquisition of general handicraft technologies skills
1.	<ul style="list-style-type: none"> - a large number of pupils in the classroom, - work in groups, - procurement of materials and equipment depends on teachers, - restless working atmosphere, - positive emotional atmosphere, - a classroom is not suitable for the acquisition of nutritional education. 	<ul style="list-style-type: none"> - pupils' materials and tools, - acquisition of work skills (individually, in pairs, in a group, collectively)*, - with regard to the personal development aspect,* - with regard to the educational aspect. <p><i>*with regard to the teachers' work organization.</i></p>
2.		

After discussions with the pupils, it was found out that there are few primary schools where pupils acquire skills planned in nutritional education, those are only 5%. Mostly this curriculum of Home Economics and Technologies is acquired by pupils theoretically, there is the absence of opportunity to acquire the essential basic requirements for form 3 specified in the standard of the subject – *to cook simple dishes, without the use of heat treatment; to be able to lay the table for a simple daily meal, to deal with cutlery, to behave during the meal time*. For all pupils to acquire the planned training content in the primary school at housekeeping by considering the necessary safety and hygiene requirements it is denied by the classroom layout, incomplete material technical base. There is an apparent contradiction between theory and practice, since nowadays there is the idea that all people together are supposed to learn to manage a household and plan their life in the conditions of the 21st century. The justification of pupils' life activity acquisition can be discovered in primary education standard, in the objective of the subject of "Home Economics and Technologies" – to develop the learner's understanding of the safety and quality conditions in the human environment and the quality of security conditions and opportunities of their improvement, to promote the learner's practical activity and the development of social cooperation skills, ... (*Noteikumi par valsts ...*, 2006).

In the study of Home Economics and Technologies cooperation skills can be successfully acquired by doing a pair, group or even collective work. J. David believes that an effective group is the one in which pupils are able to successfully fulfill the tasks, at the same time each pupil is ready to take on different roles in a group depending on the requirements of the task. When assessing a pupil's ability to work well in a group, the teacher has to encourage the pupils, to motivate them to analyze their own performance in order to encourage each pupil's achievements (David, 1991, 23). Collaborative skills, according to S. Rone, are one of the most important life skills in the pupils' preparation for life activity. The main findings of the humanistic interaction are to help the pupil to self-develop, which is one of the main components of the life activity. It is directed to develop initiative, self-control, self-esteem (Rone, 2006, 374). Thinking about pupils' life skills acquisition and growth opportunities at school, in the study of Home Economics and Technologies it is necessary to promote pupils' self-organization skills, develop self-discipline. The research found that self-esteem in the study of Home Economics and Technologies is built gradually and as a result becomes a habit of only 33% of the schools involved in the research. In the rest of the schools teachers negotiate with pupils, figuring out what was easy and difficult for pupils, but it does not provide the pupils with the opportunity to assess themselves by specific evaluation criteria

J. Azārovs believes that a clever pedagogical control activates autonomy. An adult's and child's mutual cooperation in the education process always consists of two layers. The first layer – it has to be felt, but not excessive, so that the second layer – autonomy – could freely develop. The author emphasizes that leadership teaches many things but it suppresses the craving for independence, it does not give much effect (Azārovs, 1986, 162). The research in Latvia within the period of several years indicates that the learning process is mainly dominated by the frontal work; teachers use the explanatory illustration method (Volāne, 2013, 106).



There is a different situation in Cambodia, where children's life since childhood is intimately connected with the acquisition of life activity skills. At the age of five, according to Dayaneetha De Silva, they start looking after their younger siblings. At the age of ten, girls are expected to help their mothers with simple household tasks, while boys have to look after the family livestock (Dayaneetha De Silva, 2001, 22). It is to admit that the situation is similar to what was the observation in Latvia in 1920s, when in the school lesson plans it was specified that there were 4 lessons a week planned for handicrafts and work in the school garden both in form 1 and form 2 (*Tautskolu rokdarbu ...*, 1925).

Dayaneetha De Silva considers that a large number of pupils do not finish primary school. Many children drop out to help their parents earn a living. Cambodian children often have to drop out of school to work and support the family. Many of them work as street vendors, factory workers, and tour guides. International and local organizations are working to get children out of the work force and back to school (Dayaneetha De Silva, 2001, 24). According to the data of 2004 the primary school was finished by 24% of pupils, but substantially higher percentage is the number of pupils who have not completed the primary school (56%). (Keo Phoung, 2004, 279). Visiting a Cambodian school, it is to admit that the education system described in the literature was really confirmed. I must

say that the autonomy acquired in the family and a serious attitude toward the school contributes to the pupils' life, acquisition of necessary work skills, including ability to cooperate (Table 3).

Table 3

The acquisition of pupils' life activity skills in Cambodia

No.	Acquisition conditions of pupils' autonomy	Acquisition characteristics of agricultural work skills
1.	Living conditions, including a big number of children in a family. Necessity (care about the survival); Poor material resources, Traditions.	Pupils' work in groups: <ul style="list-style-type: none"> • in agriculture – growing rice all around the year; • in poultry farming – chicken farming, A pupil's autonomy, without a teacher's supervision; Assessment – the crop obtained.
2.		



In the course of the study the Cambodian pupils' high level of autonomy was astonishing. At the handicraft lesson pupils worked independently without a teacher's supervision. The teacher's main and the most complicated task were to prepare assignments for 46 pupils in the form, to create the conditions for carrying out the group work. Primary school pupils acquired a skill to grow rice, as well as mastering a skill in poultry farming, i.e. to grow poultry chicken. There is only one criterion for the acquisition of skills – the crop obtained, which ensures each pupil's responsibility and a serious attitude to work to be done. Observing the pupils at work, I must say that D. Prets' cognition was confirmed that working in groups, taking into consideration the conditions of task completion, the pupils' thinking becomes more critical, reaching better learning results (Prets, 2000, 174). In the group work pupils are more involved in the learning process, than it is possible at a traditional lesson. The most important thing is that the pupils added their own experience with other group pupils' experience. I must admit that the pupils' high level of autonomy caused admiration in Latvian teachers. As a result of discussions with the teachers we found out that the living conditions, the environment is one of the conditions for pupils' autonomy, responsibility, because from an early age children are supposed to take care of their brothers and sisters, they are responsible for each other (Table 3).

It is to admit that the experience in Sweden reveals another model of acquisition of the study content of Home Economics and Technologies in the aspect of pupils' life activity acquisition. With regards to the study content there is no difference with the study content of Home Economics and Technologies in Latvia. The main difference is in the organization of work, in material support and technical base, in the layout of the handicraft room. Pupils - both boys and girls acquire life activity skills in a peaceful atmosphere; they work in small groups, consulting with the teacher (Table 4).

During the study it was observed that it was important for pupils to deliberate themselves in this work, especially if the acquiring skills were applicable to real life conditions. We ascertained that at the lessons of Home Economics and Technologies pupils acquire life activity skills more successfully if there is an opportunity to improve their experience in accordance with the logic of development, in the corresponding environment for each personality. Building of pupils' qualities (patience, independence and cooperation) in activity is no less important in the pupils' life activity acquisition process. Pupils' life activity skills are expressed as the results of activity, behaviour, attitudes, which are determined by the internal need for joy, satisfaction and awareness of the importance of the value, significance of the acquired skills.

Table 4

Acquisition of pupils' life activity skills in Sweden

No..	Characteristics of textiles skills acquisition	Characteristics of metal and wood working skills acquisition
1.	- a form is divided into two groups (one acquires work skills with metal and wood, the other with textile materials) - pupils learn life activity skills individually, - boys and girls learn together, - excellent material technical base, - school materials and tools, - a favourable learning environment, - a calm working atmosphere, - serious attitude to work	
2.		

After consultations with the teachers we found out that pupils do not feel the acquired life activity skill as a necessity but more like one of the self-actualization capabilities. It can be explained with the high level of development in the country and a peaceful atmosphere in the family.

Summarizing the results of the study, it can be concluded that in the study of Home Economics and Technologies it is important to organize the learning process so that the pupils acquire life activity skills as self important. At the same time the results of the research led to the belief that pupils need to increase the number of lessons (2 lessons per week) for practical sessions. During the research it was found out that the acquisition of life activity skills is more effective when combined with the acquisition of new technologies, non-traditional activities, and pupils' previous experience.

Conclusions

In the course of the research, we found out the conditions in the primary school pupils' life activity skills acquisition in the study of Home Economics and Technologies:

- the unity of theory and practice during the acquisition of study content,
- appropriate learning environment that facilitates pupils' self-organization, self-discipline skills, satisfies pupils' desire to act in accordance with their capabilities and the need to assert themselves,
- connection of pupils' self-evaluation with particular task conditions, assessment criteria in the learning process,
- living conditions, the environment that facilitates pupils' independence, cooperation and responsibility,
- the significance of pupils' qualities (patience, independence and cooperation) in the process of the pupils' life activity skills acquisition.

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