



**EXPEDUCOM**

# **A HANDBOOK ON EXPERIENTIAL EDUCATION.**

## **PEDAGOGICAL GUIDELINES FOR TEACHERS AND PARENTS**

Erasmus+ Project:

Experiential Education Competence  
(teaching children aged 3-12) – EXPEDUCOM

The grant reference number:  
2014-1-LT01-KA200-000368

**Editors:**

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Descrierea CIP a Bibliotecii Naționale a României:

**MASSARI, Gianina-Ana, MIRON, Florentina-Manuela,  
Violeta KAMANTAUSKIENE**

**A Handbook on Experiential Education. Pedagogical  
Guidelines for Teachers and Parents / Gianina-Ana  
Massari; - Iași: Editura Universității Alexandru Ioan  
Cuza din Iași, 2016**

**ISBN 978-606-714-309-6**

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## **FOREWORD**

**Violeta KAMANTAUSKIENE**

Experience-based education is the method or way of teaching through doing, namely it is the process during which young learners obtain knowledge and skills via personal experience. Individuals are involved in a particular activity which they reflect, analyze and that brings higher level of awareness and/or changes in behavior

World tendencies require to educate young learners so that they were creative, flexible, able to analyze, think critically.

It is common sense that the most predominant tendency in education is to educate young learners so that they become creative, flexible, able to analyze, critical thinkers, independent and democratic citizens.

EXPEDUCOM is a project risen from the needs to meet the requirements of the modern world via developing and implementing innovative educational practices related to experience-based pedagogical approach addressed to children aged 3-12.

The project outcomes target at strengthening the professional profile of in-service educators as well as students - future teachers by developing pedagogical guidelines on experiential education, open educational tools-real life cases, offering training for improvement of professional and communicative skills, improving curricula of pre-school, primary and teacher training institutions.

This handbook rose from the needs to meet the requirements of the modern world via developing and implementing innovative educational practices related to experience-based pedagogical approach educating children aged 3-12.

This handbook constitutes an approach for investigating the theoretical and practical training strategies from the perspective of experiential education. The purpose of this paper aims to provide theoretical and practical tools useful in early education specialists and primary education by developing practical strategies component, to support the development of educational activities and research to adapt permanently instructive approach to the specific demands of contemporary society. Due to changes at multiple curricular authors develop paradigms for training future teachers and introduce the need for activity planning, implementation and evaluation of training through experiential learning activities, thereby contributing directly to improving interactive teaching strategies.

Given the above, this handbook is organized as follows:

*Part A.* General framework on experiential learning

What is experiential learning? (Concept; Characteristics of experiential based learning; The principals of experiential orientation; Experiential based learning stages; Teacher roles; Children roles; Integration of experiential learning in teaching); Overview of conceptual foundations on the experiential based learning (Instructional models for the experiential learning theory; Dewey's foundations for the experiential based learning; Implications of Vygotsky's ideas on learning process; Bruner's conceptual contribution to the experiential based learning; The Jean Piaget's perspective; Kolb's experiential learning theory); Citizenship and 21<sup>st</sup> century education (An overview of 21<sup>st</sup> century skills education; What kind of citizens are needed in the Netherlands in the 21st century?); Different approaches of experiential education (Reggio Emilia Approach; High Scope Approach; Pedagogy in Participation or MEM)

*Part B.* International research report on experiential learning approaches

*Part C.* Examples of experiential based learning developed in different countries structured as case studies on experiential education in kindergarden and case studies on experiential education in primary school.

This handbook aims to provide the necessary and adequate information regarding experiential learning and teaching and is directed to parents, students and educators of preschool and primary school children. More specifically, the outcomes of the project directly address teachers working in kindergartens and primary schools; students of pre-school and primary education; teacher trainers, researchers at universities providing pre-school and/or primary education; parents or anybody interested in education of children aged 3-12.

**PART A.**

**GENERAL FRAMEWORK ON  
EXPERIENTIAL LEARNING**

## **2.2. DEWEY'S FOUNDATIONS FOR THE EXPERIENTIAL BASED LEARNING**

CRISTINA MESQUITA

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The conceptualizations of Dewey about the value of experience, interest, reflective thinking, democratic education are important foundations for pedagogy and for experiential based learning.

### **The method**

Dewey's ideas (1953, 2001) were firstly influenced by Hegel's vision that connects the subjective and objective, the material and the spiritual and the divine and the human. However, his concern with the practical problems, and influenced by the theories of evolutionary

biology of Darwin and the genetic perspective and dynamics of experimental studies of William James, gradually moved away from the absolute idealism of Hegel's thought towards the pragmatism and experimental psychology (Westbrook, 1993). He values the significance of the experimental method as an educational method. He argues that learning experience requires observing materials and processes, inquiring, following clues of ideas to discover connections, and carry out activities to test hypotheses. This process includes moments of observation, review and synthesis, analysis and discussion of the meaningful elements of the experience. Dewey's educational model, synthesized on table 1, uses an approach that is based on experience and requires reflective thinking.

Table 1. Dewey's Educational Model

<b>Phase</b>	<b>Summary</b>
Sensing perplexing situations	The teacher presents an experience where the students feel thwarted and sense a problem.
Clarifying the problem	The teacher helps the students to identify and to formulate the problem.
Formulating a tentative hypothesis	The teacher provides opportunities for students to form hypotheses and try to establish a relationship between the perplexing situation and previous experiences.
Testing the hypothesis	The teacher allows students to try various types of experiments, including imaginary, pencil-and-paper, and concrete experiments, to test the hypothesis.
Revising rigorous tests	The teacher suggests tests that result in acceptance or rejection of the hypothesis.
Acting on the solution	The teacher asks the students to devise a statement that communicates their conclusions and expresses possible actions.

(Adapted from Bybee et al., 2006)

In this sense, the experience is the way to involve children in the intellectual work and problem solving that could be understood as relevant for their learning.

Children are seen as researchers who take a reflexive attitude which involves reasoning and deliberating. This means that children are able to make questions and to find answers. For that they must be actively engaged in the selection of the material that can help them to think about the implications and the relationship between the material and the solution they are looking for (Dewey, 2002, p.128).

### **The interaction between experience and reflective thinking**

For Dewey (2001), reflective thinking is sustained on the value of the experience. The real experience lies in the combination of "the impression that things cause on us, the change in our actions, favoring some of them, resisting and checking others, and what we can do in them to produce further change" (p. 280). Consequently, he believes that educational situations should be based on the child's activity, what he describes as *learning by doing*. He argues that "the principle of continuity of experience means that every experience takes something from past experiences and changes, in any way, subsequent experiences" (Dewey, 1971, p. 26).

To consider the experience as truly educational, they should express a clear educational intention without representing the annulment of children's initiative and the expression of their creativity (Pinazza, 2007).

### **The learning environment**

Dewey (1971) values the experience as a source of learning, assuming that all education is experiential action performed by the subject in a learning process in action. He also emphasizes the idea that the educational experience is a direct manifestations of life itself (Gamboa, 2004). In this regard, he recognizes the school as a physical and social environment that allows the child's growth. The school's aim is "first of all to live, and learn through the interaction with that experience" (Dewey, 2002, p. 41). Because of that, it is important to use the resources from the environment, promoting study visits, contacting with the natural environment, such as discovery of locus that broaden the experiences and knowledge.

Dewey gave a strong importance to the materials in the educational process. He considered that the materials must be 'real', direct and obvious, because he understood that the more natural and direct the experiences of children are, the more meaningful the learning experience is.

In this sense, space and materials should allow the child to engage in occupations, not only for sensory training but also for the discipline of mind<sup>1</sup>.

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<sup>1</sup> In Chapter one of *How we Think*, Dewey (1910) states that: "Discipline of mind is thus, in truth, a result rather than a cause. Any mind is disciplined in a subject in which independent intellectual initiative and control have been achieved. Discipline represents original native endowment turned, through gradual exercise,

Dewey believed that education happens beyond the school. An overarching principle in Dewey is that the growth based on experiences does not have an end. It continues throughout one's life. In effect, Dewey saw education as an *experiential continuum* (Dewey, 1938, p. 28), a succession of knowledge, experiences, and individual growth – unique to each individual. This definition expresses the idea of a school as a laboratory of learning opportunities (Dewey, 1971). In this sense, school time must be flexible and move over the course of the experience moments, allowing children to: experience the materials and interact socially; talk, discuss, communicate; observe and interact with peers and adults so that they can take advantage from the action; cooperate and participate in the life of the group; reflect and become aware of what they did and what they need to do; discover the potential of experience and use it to solve problems; research to get the real meaning of the everyday experiences in the world they live in.

Dewey also argues that there is a second criterion of educational experience - the interaction. In his words, "every genuine experience has an active side which changes in some degree the objective conditions under which experiences are had" (p. 34). This requires interaction, or the interplay between external (environment - "whatever conditions interact with personal needs, desires, and capacities to create the experience which is had" p. 44) and internal conditions. Thus, these two factors (*experiential continuum* and interaction) work together to articulate truly educational experiences. Situation after situation, an individual carries over something from one experience to the next (continuity). As this happens, that individual's world grows bigger, drawing more contact with a wider range of individuals/experiences (interaction).

In the end, the role of the educator must be to understand the capacities of the children and adapt the experiences they create to those individuals' needs at the present time.

For Dewey (2002), the living experience takes place through social interaction. Dewey's concept of togetherness focuses on the interactional complicity that is held through a mutual give and take: the teacher receives but he should not be afraid to also give.

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into effective power. So far as a mind is disciplined, control of method in a given subject has been attained so that the mind is able to manage itself independently without external tutelage. The aim of education is precisely to develop intelligence of this independent and effective type - a disciplined mind. Discipline is positive and constructive" (p. 13).

## References

- Dewey, J. (1910). *How We Think*. Boston: D.C. Heath & Co, Publishers. Retrieved from <http://archive.org/details/howwethink000838mbp>
- Dewey, J. (1929). *The sources of a science of education*. New York: Horace Liveright.
- Dewey, J. (1953). *Como Pensamos*. São Paulo: Companhia Editora Nacional.
- Dewey, J. (1938). *Experience and education*. New York, NY: Touchstone.
- Dewey, J. (1971). *Experiência e educação*. São Paulo: Companhia Editora Nacional.
- Dewey, J. (2001). *Democracy and Education*. Hazleton: The Pennsylvania State University - Electronic Classics Series, Jim Manis, Faculty Editor.
- Dewey, J. (2002). *A escola e a sociedade e A criança e o currículo*. Lisboa: Relógio D'Água Editores.
- Gambôa, R. (2004). *Educação, ética e democracia: a reconstrução da modernidade em John Dewey*. Porto: Edições ASA.
- Pinazza, M. A. (2007). John Dewey: inspirações para uma pedagogia da infância. In J. Oliveira-Formosinho, T. M. Kishimoto, & M. A. Pinazza, *Pedagogia(s) da Infância*:
- Westbrook, R. B. (1993). John Dewey. *Prospects: the quarterly review of comparative education*, XXIII: 1\2, 277-91.

**ISBN 978-606-714-309-6**

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