



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:

Gianina-Ana MASSARI
Florentina-Manuela MIRON
Violeta KAMANTAUSKIENE
Zeynep ALAT
Cristina MESQUITA
Marina TZAKOSTA
Jan Karel VERHEIJ
Tija ZIRINA

EDITURA UNIVERSITĂȚII "ALEXANDRU IOAN CUZA" DIN IAȘI

Editors:

Gianina-Ana MASSARI
Florentina-Manuela MIRON
Violeta KAMANTAUSKIENE
Zeynep ALAT
Cristina MESQUITA
Marina TZAKOSTA
Jan Karel VERHEIJ
Tija ZIRINA

**A HANDBOOK ON
EXPERIENTIAL EDUCATION.
PEDAGOGICAL GUIDELINES FOR TEACHERS
AND PARENTS**



2016

EDITURA UNIVERSITĂȚII "ALEXANDRU IOAN CUZA" DIN IAȘI

Gianina-Ana MASSARI
Florentina-Manuela MIRON
Violeta KAMANTAUSKIENE
Zeynep ALAT
Cristina MESQUITA
Marina TZAKOSTA
Jan Karel VERHEIJ
Tija ZIRINA

Erasmus+

Project Title:

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

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

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

HANDBOOK CONTENTS

<i>Foreword (Violeta Kamantauskiene)</i>	7
PART A.	9
GENERAL FRAMEWORK ON EXPERIENTIAL LEARNING	
CHAPTER 1. WHAT IS EXPERIENTIAL LEARNING?	10
<i>(Gianina-Ana Massari, Manuela-Florentina Miron)</i>	
1.1. Concept	12
1.2. Characteristics of experiential based learning.....	14
1.3. The principals of experiential orientation.....	17
1.4. Experiential based learning stages.....	18
1.5. Teacher roles.....	19
1.6. Children roles	20
1.7. Integration of experiential learning in teaching	20
CHAPTER 2. OVERVIEW OF CONCEPTUAL FOUNDATIONS ON THE EXPERIENTIAL BASED LEARNING	22
<i>(Gianina-Ana Massari, Cristina Mesquita, Rosa Novo)</i>	
2.1. Instructional models for the experiential learning theory <i>(Gianina-Ana Massari)</i>	22
2.2. Dewey's foundations for the Experiential Based Learning <i>(Cristina Mesquita)</i>	26
2.3. Implications of Vygotsky's ideas on learning process <i>(Gianina-Ana Massari)</i>	30
2.4. Bruner's conceptual contribution to the experiential based learning <i>(Cristina Mesquita)</i>	32
2.5. The Jean Piaget's perspective <i>(Rosa Novo)</i>	35
2.6. Kolb's experiential learning theory <i>(Gianina-Ana Massari)</i>	37
CHAPTER 3. CITIZENSHIP AND 21ST CENTURY EDUCATION	39
<i>(Jan Karel Verheij, Frank van Herwaarden, Gerben de Vries)</i>	
3.1. An overview of 21 st century skills education (Jan Karel Verheij, Frank van Herwaarden).....	39
3.2. What kind of citizens are needed in the Netherlands in the 21st century? <i>(Gerben de Vries)</i>	47
CHAPTER 4. DIFFERENT APPROACHES OF EXPERIENTIAL EDUCATION	62
<i>(Marina Tzakosta, Cristina Mesquita, Rosa Novo)</i>	
4.1. Reggio Emilia Approach <i>(Marina Tzakosta)</i>	62

4.2. High Scope Approach (<i>Cristina Mesquita</i>)	65
4.3. Perspective of the Modern School Movement (<i>Rosa Novo</i>).....	70
PART B. RESEARCH REPORT SURVEY.....	73
Chapter 5. INTERNATIONAL RESEARCH REPORT ON EXPERIENTIAL LEARNING APPROACHES	74
PART C.	112
EXAMPLES OF EXPERIENTIAL BASED LEARNING DEVELOPED IN DIFFERENT COUNTRIES	112
CHAPTER 6. CASE STUDIES ON EXPERIENTIAL EDUCATION IN KINDERGARDEN	113
6.1. Greece: <i>Teaching Mathematics In An Experiential Way...</i>	114
6.2. Latvia: <i>Three Little Piglets And A Wolf</i>	120
6.3. Lithuania: <i>Experiential Learning Project “Friendly Vegetables”</i>	123
6.4. Lithuania: <i>Experiential Learning Project “I Care About Our Nature”</i>	127
6.5. Lithuania: <i>The Smart Games</i>	132
6.6. Lithuania: <i>Experiential Learning Activity “Math Outdoor”</i>	136
6.7. The Netherlands: <i>Enrich Outdoor Education By ICT</i>	141
6.9. Portugal: <i>Germinating Seeds</i>	150
6.10. Romania: <i>Experiential learning project in early childhood education: Floating Raisins</i>	156
6.11. Romania: <i>Geometrical Shapes Through Outdoor Learning</i>	164
6.12. Romania: <i>Experiential learning project in kindergarden: Invisible Ink</i>	168
6.13. Turkey: <i>Healthy Life Style</i>	171
CHAPTER 7. CASE STUDIES ON EXPERIENTIAL EDUCATION IN PRIMARY SCHOOL	175
7.1. Greece: <i>How the “refugee issue” helps children become citizens of the world</i>	176
7.2. Latvia: <i>Three little piglets and how they built their houses</i>	182
7.3. Lithuania: <i>A beautiful world. Noun plurals</i>	186
7.4. Lithuania: <i>Happy geometrical shapes</i>	192

7.5. The Netherlands: <i>From people planet prosperity towards involved citizenship</i>	197
7.6. Portugal: <i>Researching about space, astronauts, planets and stars</i>	201
7.7. Romania <i>Experiential Learning Project In Primary School: Let's Count Outdoor!</i>	205
7.8. Romania: <i>Architectural and Environmental Issues As Experiential Learning Activity</i>	209
7.9. Romania: <i>Experiential Learning Project In Primary School: Bean's Diary</i>	213
7.10. Romania: <i>Experiential Learning Project In Primary School: Build A Parachute!</i>	217
7.11. Turkey: <i>Wind power</i>	221
PART D.	226
Chapter 8. INSTEAD OF CONCLUSIONS (Gianina-Ana Massari).....	
REFERENCES	228

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 21st century education (An overview of 21st 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**

4.2. THE HIGHSCOPE APPROACH: LEARNING THROUGH ACTION

CRISTINA MESQUITA

Instituto Politécnico de Bragança, Portugal

The HighScope curriculum is a preschool pedagogical approach that offers kindergarten teachers a set of ideas and practices supported by the children development, as they value the action of their learning process (Hohmann & Weikart, 2007).

This approach emerged from the work developed by David Weikart and his colleagues in the Perry Preschool Project, from the idea that preschool education was the educational base to prevent educational failures of the children from poor areas (Schweinhart & Weikart, 2010).

According to Schweinhart and Weikart (2010), the HighScope curriculum has, through the time, established a few conceptual lines that make this an approach under constant update. The program was supported, since the beginning, on John Dewey progressive education and on the child development theories of Jean Piaget². More recently, it also incorporates the contributions of sociocultural work by Lev Vygotsky

² To analyze the curricular evolution of the HighScope approach and its theoretical support *vide* Oliveira-Formosinho (2007a). The High-Scope curricular model contextualization in the scope of the Projecto Infância, *In J. Oliveira-Formosinho (org.), Modelos Curriculares para a educação de infância: construindo uma práxis de participação*, (pp.41-92). Porto: Porto Editora.

(1991), the cognitive and development psychology, in particular on the studies developed by Clements (2004) Gelman and Brenneman (2004), the National Research Council (2005) and on the ideas of Shore (1997) and Thompson and Nelson (2001) (quoted by Schweinhart & Weikart, 2010).

In the HighScope approach, the child is recognized as an active learner, that learns better from the activities that herself plans, develops and reflects on. As Hohmann and Weikart (2007) state, the “learning through action is defined as the learning in which the child build new understandings based on her actions on the objects and on the interaction with people, ideas and events” (p. 22). This kind of learning is considered, by the authors, as necessary to the cognitive restructuring and development.

In the HighScope approach, the educational intentionality is greatly valued. For the child to learn, she has to experience the world, reflect on it and create meanings from these experiences. The intentionality refers to the way adults interact with children and how they establish authentic relations, based on the construction of a shared thought (Epstein, 2007b). All the curricular structure of the approach is intentionally structured to support active learning. The HighScope approach favours the active learning centred curriculum and the children active and participative learning, as explained next.

The interactions and the role of the kindergarten teachers

The teachers, like children, are considered as active learners. Through evaluation and daily planning, considering the Key Developmental Indicators (KDIs), adults access children's experiences and continually assess the learning environment to appropriate the overall picture of the interests and abilities of each one. Teachers are educational support, observing the interactions of colleagues with children and thinking collaboratively about the actions of each one challenging in this way, their continuing professional development (Schweinhart & Weikart, 2010).

One concern of educators is to build a learning environment that encourages the confidence, the autonomy and the initiative of children. There are five key ingredients to guide educators in this goal: i) the organization of spaces and materials, considering its abundance, age appropriateness and the possibility for having different uses. This point is related to the piagetian idea that learning takes place through the direct action of children with the materials (Piaget, 1983); ii) the active manipulation of objects, considering that when children has direct experiences with materials, they have the opportunity to explore, with all the senses, combining and transforming its initial use; iii) the choice, allowing the children to decide what they want to do, because the learning results from the attempts children make to defend their interests and follow their

objectives; iv) the enhancement of communication language and the child's thinking. Children communicate their ideas, needs, feelings and discoveries through their emotions, facial expressions, sounds, gestures and words. Adults value and encourage these forms of expression, establish proximity and security relationships with children; v) the adult, as scaffold, recognizes and encourages the intentions, actions, interactions, communication, exploitation, problem solving and creativity of children (Lockhart, 2011).

Daily routine

To create an environment in which children actively learn is important to design a consistent daily routine. This daily routine, in the HighScope approach, takes place in specific time segments corresponding to certain activities that children have to do, like plan their activities, interact in large groups, implement their plans to play in the schoolyard, eat or rest (Hohmann & Weikart, 2007). The following elements are considered.

Plan-do-review sequence (planning time, work time, recall time)

In the Highscope approach the sequence plan-do-review is a key element for the active learning. It includes all the fundamental aspects of that activity: the materials, the handling, the choice, the language, the communication and thinking. Children plan, make choices, think about the possibilities of the materials as they reflect on their actions with the support of adults (Hohmann & Weikart, 2007).

This cycle starts with a time to **plan**. Preschoolers are able to make choices, to decide actions and act deliberately on the materials. In this regard, a plan is necessary for children to think on them systematically.

The time **to do**, in the cycle plan-do-review refers to the moment when children put in action their intentions. It is the time of greatest length of the day, in which children embody their intentions, play and solve problems.

Afterwards it is the time for remembering the original plan developed during the working time. The time to **reflect**, in HighScope approach, goes beyond the mere description of their work. Engaging children for thinking requires the adults' stimulation that makes them aware of the learning they have done, the interests that this experience caused in them, how they can extend that activity, anticipating ideas for the next day (Schweinhart & Weikart, 2010). The reflection promotes the broadening of the knowledge that can be used in other situations (Epstein, 2003).

Small-group time

During small-group time, a group of six to eight children is with an adult to experience, explore, work with materials and talk, offering a

variety of active learning experiences. Adults they plan learning experiences, considering the interests and needs of children, the exploitation of a new material or problem solving (Hohmann & Weikart, 2007).

Large-group time

At the time of large-group, everyone, children and adults, gather to play games, sing songs, perform movement activities, playing instruments or listening to a story. At this time the children can participate and share ideas with colleagues, or follow the ideas of the others. The adults, regard the large-group time as an opportunity for share common experiences with children. Adults organize learning experiences, structuring them in order to share the lead with the children, encouraging their participation (Schweinhart & Weikart, 2010).

The Key Developmental indicators (KDIs)

The development of children, in HighScope approach has reference to a set of key indicators established from research on developmental theories.

The HighScope³ curriculum identified 58 KDIs in eight content areas: approaches to learning; social and emotional development; physical development and health; language, literacy, and communication; mathematics; creative arts; science and technology; social studies (in <http://www.HighScope.org>).

The KDIs is a flexible system built from the assumption that children's development takes place in a *continuum* and that children have rhythms and different levels of development. Indicators are reference points for the educator to know which way to go with each child that must be articulated with the principles listed above, inherent in a participatory and active learning.

Child Observation Record (COR)

The Child observation record (COR)⁴ is an instrument that provides comprehensive information on the continued development of children. It can be used at any developmental line program (HighScope Educational Research Foundation, 2003; 2005).

The COR for preschoolers is organized in six categories representing the major areas of child development: initiative, social relations, creative representation, movement and music, language and literacy, mathematics and science. The children is observed in

³ For a more detailed Reading on the HighScope curriculum, *vide* <http://www.HighScope.org/Content.asp?ContentId=566>.

⁴ There are two COR instruments, one destined to baby observation (0-2 years old) and another for preschoolers observation (3 to 6 years old).

various items (3-8) in each category, describing important behaviours of the developmental level.

In the HighScope approach, all aspects are essential to the delivery of the researched outcomes. These include the focus on supporting play and children's interests; the commitment to active learning; the child choice and sharing control with children; the focus on children's strengths; the focus on the environment including the materials and resources used; the plan-do-review sequence; the six step problem solving approach to social conflict; the flexible but predictable daily routine; the regular small and large group activities; the KDIs and the COR; the focus of teachers on authentic relationships with children and families; the intentionality of the teacher and the daily professional conversations between staff.

References

- Epstein, A. (2007b). *The Intentional Teacher: Choosing the Best Strategies for Young Children's Learning*. Washington, DC: National Association for the Education of Young Children.
- Epstein, A. (Spring de 2008). *Understanding High/Scope Curriculum "Content Areas" and "KDIs"*. Obtido de HighScope, Resource Reprint: <http://www.HighScope.org>
- HighScope Educational Research Foundation (2003). *High/scope Child Observation Record (cor) For Ages 2 1/2 - 6*. Ypsilanti, Michigan: HighScope Press.
- HighScope Educational Research Foundation (2005). *Child Observation Record (COR): Information for Decision Makers*. Ypsilanti, Michigan: HighScope Press.
- Lockhart, S. (2011). *Active Learning for Infants and Toddlers: Even the youngest children actively engage the world around them*. HighScope ReSources, 5-10.
- Hohmann, M. & Weikart, D. (2007). *Educar a Criança*. Lisboa: Fundação Calouste Gulbenkian.
- Piaget, J. (1983). *Seis Estudos de Psicologia*. Lisboa: Dom Quixote.
- Schweinhart, L. J. & Weikart, D. (2010). *The HighScope Model of Early Childhood Education*. In J. Roopnarine & J. E. Jonhson, *Approaches to Early Childhood Education* (pp. 191-212). Upper Saddle River, NJ: Merrill.
- Vygotsky, L. (1991). *A Formação Social da Mente*. São Paulo : Martins Fontes.

ISBN 978-606-714-309-6

EDITURA UNIVERSITĂȚII "ALEXANDRU IOAN CUZA" DIN IAȘI