

International Conference

19-24<sup>th</sup> March



ISCAR <sup>20</sup>/<sub>19</sub>

IOANNINA

# Crisis

## in Contexts

Book  
of Abstracts



ISCAR International Society  
for Cultural-historical  
Activity Research







## **ISCAR Regional Conference**

University of Ioannina, School of Education  
Department of Early Childhood Education  
University of Crete, School of Social Sciences  
Department of Psychology

**"Crisis in Contexts"**

**BOOK OF ABSTRACTS**

**Edited by**

**Katerina Plakitsi**

**Eftychia Nanni**

19-24 March 2019

Ioannina, Greece

*ISCAR 2019 Regional Conference: Crisis in Contexts: Book of Abstracts*

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19-24 March 2019

Ioannina, Greece

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## Welcome to the ISCAR 2019 Regional Conference

The region of South and Central Europe and Middle East of the International Society for Cultural-Historical and Activity Research (ISCAR) (<http://www.iscar.info/>), the Department of Early Childhood Education of the School of Education of the University of Ioannina and the Department of Psychology of the School of Social Sciences of the University of Crete, are happy to announce the organization of the International conference “Crisis in Contexts”. The conference will be held at the University of Ioannina in Greece (<http://www.uoi.gr/en/>), from the 19th to the 24th of March 2019.

The conference theme invokes the study of crisis in the past, present and future through the prism of cultural-historical activity and research. Challenging issues and practices, new ideas at different levels of human development at different parts of the world have raised deep conversations as well as new era in the socio-cultural field of research. The conference aims to promote dialogue as well as discussions about crisis in different contexts and to explore questions, problems, methodologies and practices in the traditions of cultural-historical activity theory.

Themes of the conference:

1. Crisis in the socio-cultural research context
2. Epistemology and methodology in crisis situations
3. Crisis in psychology and social sciences
4. The effects of social and economic crisis on health, family, and education
5. Human development at times of crisis
6. Science, Technology, Engineering, Arts and Mathematics Education in a cultural historical context
7. Sustainable development at times of crisis
8. ‘Perezhivanie’ and human drama at times of social crisis
9. Crisis and psychological processes
10. Crisis and collective memories
11. Inclusion and special needs at times of the crisis
12. The use of social media and multimodality during the crisis
13. Creativity and art at times of crisis
14. Alternative scientific approaches at times of crisis
15. Responsive societies in crisis situations

**The Conference is supported by the University of Ioannina, University of Crete, Region of Epirus, Municipality of Ioannina and the Regional Directorate of Education.**

**The Organizing Committee publicly appreciates the great contribution of the supporters of the ISCAR 2019 Conference. We could not accomplish our goals without the support, involvement and enthusiasm of over 70 committed supporters.**

*You are welcome to the Ioannina City at the Region of Epirus in Greece and  
we wish you a great Conference!*

*The President of ISCAR and the Chairs of the Conference*



# **ABSTRACTS**



# Wednesday, 20th March

**h. 19:00-20:00, Ceremony Hall “GEORGIOS MYLONAS” Centre of the University Campus**

## **KEYNOTE 1:**

***Expansive Learning and Concept Formation: Cycles, Germ Cells and Formative Interventions***

**Yrjö Engeström**, Email: yrjo.engestrom@helsinki.fi  
Professor, CRADLE, University of Helsinki, Finland

**Chairs:** Rector, v. Rectors, Dean, ISCAR President

Based on cultural-historical activity theory, the theory of expansive learning offers conceptual and methodological instruments for studies of and interventions in learning processes that go beyond the information given, creating new objects and patterns of activity. Initially formulated about 30 years ago, expansive learning theory is in continuous movement as human activities undergo transformations. I will introduce the theory and some of its new developments by examining three cases: (1) the case of elderly home care clients and professional home care workers in Helsinki, learning to foster sustainable physical mobility of the clients; (2) the case of Brazilian indigenous undergraduate student-teachers moving between their indigenous cultures and capitalist market economy, learning mathematical concepts and procedures to manage their scholarship money; (3) the case of the heterogenous coalition of the Finnish strategy for the eradication of homelessness, learning to replace homelessness with the principles and practices of ‘Housing First’. The three cases represent very different temporal and socio-spatial scales of learning. I will examine each one of them through three conceptual lenses, namely (a) the cycles of expansive learning accomplished in the case, (b) the ‘germ cell’ of a new concept generated in the learning process, and (c) the formative interventions involved in supporting the expansive learning process. I will conclude by discussing the new potentials and challenges the three cases pose for the theory of expansive learning and for activity theory at large.



# Thursday, 21th March

**h. 10:00-11:30, Room A - Lobby - Conference Centre “Karolos Papoulias”**

## **SYMPOSIUM 1:**

### ***Dialectics in Activity-Theoretical Research***

**Chair & Organizer:** Yrjö Engeström, Professor, CRADLE, University of Helsinki, Finland

**Discussant:** Yrjö Engeström, Professor, CRADLE, University of Helsinki, Finland

The symposium invites researchers working within cultural-historical activity theory to deepen and sharpen their epistemological and methodological stances with the help of dialectics. Dialectics was at the core of Vygotsky’s thinking, and Il’enkov’s work on Marxist dialectics had a strong influence on scholars such as Leont’ev and Davydov. In today’s turbulent world, dialectics is needed more than ever. The challenge is to weave dialectics organically into empirical analyses of and formative interventions in mundane activities, communities and organizations facing and undergoing transformations.

The symposium will consist of three presentations. First, Manolis Dafermos (University of Crete) will discuss dialectics as the general backbone in cultural-historical psychology and activity theory, with the title “Why dialectics?” Second, Silvia Ivaldi (University of Bergamo, Italy) and Annalisa Sannino (University of Tampere, Finland) will present an analysis of dialectical contradictions in the activity systems of different types of co-working spaces, titled “Constradictions in coworking: Toward a dialectical understanding of new forms of organizing.” Third, Yrjö Engeström (University of Helsinki, Finland) and Giuseppe Scaratti (Catholic University of Milan, Italy) will present an analysis of germ cells and ascending from the abstract to the concrete in learning processes within different organizational contexts, titled “The formation of germ cell at work: Enhancing expansive learning processes.”

#### ***S1.1 Why dialectics?***

**Manolis Dafermos**, E-mail: mdafermo@uoc.gr

Associate Professor of Psychology, Department of Psychology, School of Social Sciences, University of Crete

Anglo-American philosophy in the twentieth century was penetrated by hostility to dialectics. There is a paradox between the rapidly growing real social contradictions and the ignorance and devaluation of the dialectical way of reasoning that offers the opportunity for their fruitful conceptualization. It is hard to shed light on dramatic societal changes and increased social fluidity of the globalized world full of contradictions

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without a dialectical way of reasoning. By focusing on interrelation and change, the dialectical approach offers a deeper understanding of complex phenomena in comparison with reductionism and elementalism that remains a widespread tendency in various disciplines. In contrast to the functionalistic examination of society in a constant state of equilibrium, dialectics highlights the perspective of its historical development and radical change.

***S1.2 Contradictions in co-working: Toward a dialectical understanding of new forms of organizing***

**Silvia Ivaldi**, E-mail: [Silvia.Ivaldi@unicatt.it](mailto:Silvia.Ivaldi@unicatt.it)

Università Cattolica del Sacro Cuore, Milano, Italy,

**Annalisa Sannino**, E-mail: [annalisa.sannino@uta.fi](mailto:annalisa.sannino@uta.fi)

University of Tampere, Finland

Coworking has been studied in different countries, continents, and social environments from the perspectives of various disciplines, including psychology, sociology, economic planning, urban informatics, management, design, real estate, urban studies, and engineering. The potential of coworking has been identified at different levels in terms of its facilitation of social processes, innovation and entrepreneurship, and its potential for promoting social change. With the present contribution the authors challenge the predominant interpretation of coworking in literature that describe coworking as a new form of distributed organization necessarily based on the values of “Community, Openness, Collaboration, Sustainability, and Accessibility”. At stake is the meaning of the prefix ‘co’, that instead to be identified as the short of ‘co’mmunity and ‘co’llaboration could be interpreted, with a play of words, as evoking multiple positions and views that brought about to plural ‘co-ntra’-dictions. More specifically the authors analyze the contradictions and tensions that characterize coworking in order to better understand its meaning and possibile evolutions. The research presented in the paper is based on: 1) an historical analysis of the evolution of coworking and 2) an ethnographic research realized on four coworking spaces in Milan, Italy. The historical analysis is oriented to understand the main changes that have characterized the emergence of different meanings of coworking and different coworking activities, along with the tensions that characterize the historical evolution of coworking. The ethnographic research took place after the first qualitative study was concluded in 4 coworking spaces. In each space, the participant observation (which included field notes, conversations, and photographs) was also integrated into formal interviews with participants (coworkers and operators). The paper discusses the main contradictions that characterize the different coworking activities. The analysis explains the risk that coworking can be considered, variously, as an obligation instead of a choice (to choose instead to have a private office), a way to reduce costs and make profit, or a way to create a new business or not for profit organization. The research in fact identified a possible crescendo and intensification of contradictions towards a potential crisis. This is connected to the risk of an ‘empty’ and meaningless role of coworking, by which it becomes a commodity, an instrument useful

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to promote image, acknowledgment, or economic incomes to other ends and initiatives, by reproducing the traditional capitalistic logics of work.

***S1.3 The formation of germ cell at work: Enhancing expansive learning processes***

**Yrjö Engeström.** Email: yrjo.engestrom@helsinki.fi

University of Helsinki, Finland

**Giuseppe Scaratti,** E-mail: giuseppe.scaratti@unicatt.it

Catholic University of Milan, Italy

The contribution presents an analysis of germ cell and the principle of ascending from the abstract to the concrete in learning processes within different organizational contexts. We refer to the principle of ascending from the abstract to the concrete as the foundational method of dialectical thinking, developing Ilyenkov's and Davydov's insights into an interventionist approach for nourishing expansive learning and transformative agency.

The actual reconfiguration of workplaces and organizational contexts is increasingly connected to meaningless situations, with huge uncertainty, insecurity, lack of information and rapidly changing and turbulent backgrounds, often generating a collapse of the sense of activity, seeking for new emergent objects of work. We argue that the process of forming a germ cell is a pivotal aspect to promote and give rise to knowledge sharing, learning, and organizational change, generating new means to manage situations of uncertainty. As the smallest part of the whole that explains the problematic situations by showing relationships that were not visible and offering a perspective for resolving and transforming them, the germ cell constitutes a starting point and red thread for radical exploration of new knowledge and emerging activities in organizational contexts.

Through three examples of formative interventions, we focus on the process of the construction of the germ cell, moving from the problematic situations in order to promote expansive organizational learning and dialectical thought. Within a concrete and situated activity system, this means that we deal with critical events and identify embedded systemic contradictions behind them. Our first case deals with the biggest blood donors' association in Italy. The presence of numerous sites in different territories and the variation in the members commitment have brought a difficulty for the organization in checking and monitoring the functioning of all the sites. For this reason, the national management has perceived the risk of an organizational fragmentation. The second case concerns a, Italian health district that coordinates and controls activities on the local territory, designed to ensure citizens' well-being. The major challenge for the organization is to redefine its organizational structure and to rethink roles, functions, and projects, accompanied by the need for professionals to change their approach to work and manage projects increasingly oriented to collaboration and joint planning with professionals who belong to different areas and functions. Our third case deals with the promotion of physical mobility of elderly patients within the municipal home care services of Helsinki, Finland. In this case, the fragmented standard services offered to the clients did not meet the clients' holistic vital needs. We will examine each case in order

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to identify critical aspects and challenges in the formation of germ cells in emancipatory efforts at expansive organizational learning.

**h. 12:00-13:30, Room A - Lobby - Conference Centre “Karolos Papoulias”**

**SYMPOSIUM 2:**

***Cultural-Historical Activity Theory and Science Education: A new Dimension in STEAM Education***

**Chair & Organizer:** Katerina Plakitsi, University of Ioannina, Greece

**Discussant:** Sylvie Barma, Université Laval, Quebec, Canada

In the present work we approach a new methodological framework for Science Education through five studies which were summarized in a symposium that encompasses a wide range of topics pertaining to the connection of Cultural Historical Activity Theory (CHAT) with Science Education. Jointly, the contributors to this symposium propose STEAM Education as a basis in order to foster inquiring minds, and transformative thought within a multidimensional context.

The first study presents a series of expansive Learning activities in electromagnetism for primary school based on the basic principles of CHAT. This approach reveals that the model of expansive learning can contribute effectively to the design, implementation and evaluation of science teaching. Then, we move on to a science curriculum for the early grades which makes connections of scientific concepts with History of Science and explores developing skills of scientific concepts, interactions and active citizenship. The third study emphasizes on the role of cartoons as a tool in Science Education as well as the skills of scientific method and the classroom interactions. The fourth study seeks to investigate the contradictions that emerged in the activity system of a teacher training course in Science Education. The course concerned the domain of living things within the sociocultural frame of CHAT. Finally, the last study takes us to informal settings of learning as it examines the case of the Archaeological Museum of Ioannina. It signifies the crossing of boundaries between individual and collective learning leading to the development of new organizational practices in educational institutions and systems.

***S2.1 An approach of STEAM education through the prism of CHAT and expansive learning for teaching electromagnetism***

**Efthymios Stamoulis**, E-mail: [estamoulis@sch.gr](mailto:estamoulis@sch.gr)

PhD, Department of Early Childhood, University of Ioannina, Greece

In the present work, we approach the teaching and learning of Science Education through the prism of CHAT and expansive learning. We used the basic principles of AT to design activities for the teaching of electromagnetism and analyses the participation of students in activities focusing on the relationships between subject (students, teacher) and object (concept of electromagnetism) and on the influence of intermediary artifacts that they got necessary specific characteristics.

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Students worked in a context that represents many years of scientific work to prove the unit of electric and magnetic phenomena; this helped them form a different perspective on the development of scientific knowledge. They carried out activities on the computer, and used real materials for hands-on activities.

The analysis of data from the teachings showed that the model of expansive learning of the activity theory can be applied as a course design model for teaching science and contribute effectively to the design, implementation and evaluation of teaching. It was found that there were changes in the structure of social relations and these created new roles for the participants in the activity.

The execution of a collective activity in the teaching of science helps students to acquire new knowledge schemata and build the concept of electromagnetism understanding also the value of the advancement of science. The mediation tools are necessary to have specific characteristics that highlight the historical and cultural development of the objective of the activity and to facilitate the execution of actions and the acquisition of automated operations. Such tools can be elements from the history and philosophy of science and ICT's technologies.

### ***S2.2 History of Science and Socio-cultural Concepts of Science Education in the Early Grades***

**Charikleia Theodoraki**, E-mail: [xarikleia85@gmail.com](mailto:xarikleia85@gmail.com)

PhD, Department of Early Childhood, University of Ioannina, Greece

This research study focuses on the connection of Cultural Historical Activity Theory (CHAT) with Science Education. The main purpose is to contribute to a broader context for rethinking science learning and teaching using CHAT as a strong meditative, designing and analyzing tool, for the early grades. Within this frame, a science curriculum for the early grades was developed in order to introduce teaching scientific concepts such as buoyancy and magnetic properties. Furthermore, the curriculum makes connections of scientific concepts with History of Science and scientists. The research questions of the study concern the use of CHAT as a framework for designing and analyzing science education activities for the early grades as well as the role of History of Science in developing skills of scientific concepts, interactions within the learning community and finally reinforcing active citizenship. Research data, which include videos, pupils' drawings, photos and classroom observation notes, were analyzed through the creation of different projects in the Qualitative Data Analysis Nvivo research software. The analysis of the results has shown that the use of History of Science when teaching scientific concepts connected with pupils' interest engage them in developing a variety of skills of the scientific method. Under the prism of CHAT pupils participate in meaningful cultural activities and receive scaffolding for improving of actions towards an inspiring object into the whole activity system. All in all, CHAT offers a fruitful framework of developing Science Education curricula that can support meaningful learning and scientific literacy development.

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### ***S2.3 Tool mediation and cartoons in Science Education for the Early Grades***

**Eleni Kolokouri**, E-mail: [ekolokouri@gmail.com](mailto:ekolokouri@gmail.com)

PhD, Department of Early Childhood, University of Ioannina, Greece

This research study is part of a dissertation and focuses on the connection of Cultural Historical Activity Theory (CHAT) with Science Education in the early years. It was supported by the @fise group of Ioannina that works on new researching lines considering CHAT as a substantial paradigm in Science teaching. The theoretical framework of CHAT offers an alternative way of approaching Science Education from the early grades as it supports science activities based on socio-cultural approaches. The modern learning environments constitute multicultural learning communities, in which learners are asked to work effectively within different groups – learning communities. This process emphasizes the importance of the cultural behaviour of tools, being supported by the analysis of human activities. Within this frame, a science curriculum for the early grades was developed in order to introduce teaching scientific concepts such as floating and sinking, as well as light, shadow and colours. The didactic strategies followed the basic principles of CHAT (group work, use of instrumental and conceptual tools, interactions between subjects, mediation between subjects and community). The Science Curriculum was implemented in 4 pre-primary school classrooms of 25 pupils each. Research data were collected by observations, field notes, video recordings, interviews and classroom materials. All collected data were analyzed through the creation of different projects in the Nvivo research software. This study includes the data presentation of the research connected with the role of cartoons in Science Education as well as the skills of scientific method and the classroom interactions.

### ***S2.4 Exploring contradictions in a science teacher training course through the prism of Activity Theory.***

**Eftychia Nanni**, E-mail: [e.nanni@hotmail.com](mailto:e.nanni@hotmail.com)

PhD, Department of Early Childhood, University of Ioannina, Greece

This paper seeks to investigate the process of primary teachers' training in Science Education and more specifically in the domain of living things within the sociocultural frame of Cultural Historical Activity (CHAT) Theory. The main purpose is to focus on the contradictions that emerged in the activity system of a teacher training course in Science Education. CHAT is a socio-cultural theory that focuses on social interaction as, according to the basic principles of the theory, teaching and learning, knowledge and expertise are distributed through participation in the community. Within this frame, CHAT provides the appropriate tools in order to analyze the ways that individuals as well as groups use the mediating tools towards the object. The analyzing tools provide information about the sociocultural influence of rules, community and division of labor, while at the same time they look into interactions and contradictions within an activity system. Within the theoretical and methodological frame of CHAT, we designed and implemented a distance learning course for teacher training on Science Education, with the emphasis on the process of social interaction in which learning is gradually acquired through the participation in the appropriate activities. The structure as well as the planning of the distant learning course supported a holistic approach to the subject of living things.

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The analysis of the results of this project has shown that the sociocultural frame of CHAT is a fruitful field for designing and analyzing teachers' training interventions, especially in the domain of Science Education.

***S2.5 Identifying Contradictions in the process of the educational program design and implementation at the Archaeological Museum of Ioannina***

**Athina C. Kornelaki**, E-mail: [athinako91@yahoo.com](mailto:athinako91@yahoo.com)

PhD, Department of Early Childhood, University of Ioannina, Greece

The paper presents an innovative practice of teaching Science Education to students of early grades through educational programs in informal settings of general interest. It focuses on the case of the Archaeological Museum of Ioannina and particularly, on the development process of the educational program 'Thunderbolt Hunt'. The theoretical framework of the research is based on the Activity Theory and the methodology of the expansive learning cycle. Expansive learning aims at change and is governed by the principles of the Cultural Historical Activity Theory (CHAT). It usually signifies the crossing of the boundaries between individual and collective learning leading to the development of new organizational practices in educational institutions and systems. Expansive learning is understood as a process of constructing and solving successive evolving contradictions in the activity system. Under the above prism, the process before, during and after the development of 'Thunderbolt Hunt' educational program is analysed. The data gathered constitutes researcher's fieldnotes, minutes from the meetings occurred between the researcher and the museum's staff, the videotaped implementations of the educational program in the museum. Data analysis shows the essential role of identifying contradictions in the activity system. The contradictions in the CHAT are not considered obstacles but the driving force of the activity system, a source of change and development, and they can lead to the transformation of the activity and all its structural elements, even to new activity systems through the use of advanced tools and the search for ways to overcome inner contradictions.

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**h. 12:00-13:30, Room B – 1st Floor – Conference Centre “Karolos Papoulias”**

**SYMPOSIUM 3:**

***Reflective-activity approach – branch of cultural-historical psychology in the framework of psychological-pedagogical counselling***

**Chair & Organizer:** Viktor Zaretskii, Moscow State University of Psychology & Education, Moscow, Russia

**Discussant:** Alla Kholmogorova, Moscow State University of Psychology & Education, Moscow, Russia

Symposium “Reflective-activity approach (RAA)–branch of cultural-historical psychology in the framework of psychological-pedagogical counselling” is organized by Moscow State University of Psychology and Education specialists. It includes six reports devoted to different aspects of theory and practice of psychological-pedagogical help in overcoming learning difficulties. Theoretical issues that will be discussed: mechanism of self-development (V.Zaretskii), connection between education and health in relation with position of students in learning activity (A.Kholmogorova), the concept of subjectness position and its development in different ages (Yu.Zaretskii, V.Zaretskii). Theoretical principles are illustrated in practical-oriented reports on the base of two cases. One is devoted to the problem of personal development in process of getting help through the procedures of RAA (I.Nikolayevskaya) and the connection between the process of overcoming learning difficulties and the dynamics in different dimensions of cognitive development is described (M. Geinrikhs).

One more presentation is devoted to specific experience of workshop that was dedicated to introducing the RAA approach, and training the students of the Institute of Psychology and Education at the University of Neuchâtel, Switzerland (L.Klautzer, V.Zaretskii, I.Nikolayevskaya). The workshop raised a number of challenges: (a) although students are trained in cultural-historical psychology, counselling as such is not a topic in Psychology and Education in Switzerland, therefore, both the theoretical background of self-development through the multi-dimensional model of the zone of proximal development and the approach of counselling, as a specific way to interact and collaborate with a child, were new to the students.

***S3.1 Multidimensional model of zone of proximal development as a methodological instrument for describing the mechanism of self-development.***

**Viktor Zaretskii**, E-mail: zar-victor@yandex.ru

Moscow State University of Psychology & Education, Moscow, Russia

The process of self-development is regarded as most important “goal” of counseling psychological help in overcoming of difficulties in learning. It is possible to describe the initiation and work of self-development psychological mechanism, using Multidimensional model of zone of proximal development. The most important elements

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of this mechanism are: subject position of a student, reflexive regulation, personal relation to the problem situation, help of the consultant in the problem epicenter.

***S3.2 Position in learning activity and psychological health of students.***

**Alla Kholmogorova**, E-mail: kholmogorova-2007@yandex.ru

Moscow State University of Psychology & Education, Moscow, Russia

Report represents data about depressive and anxiety symptoms among Russian pupils and students. Shows the predictors of depressive and anxiety symptoms among Russian pupils and students. Gives the analyses of crises situation in education system on the base of international data about the conditions of children psychic health.

***S3.3 Dynamics of subject position of different age students and methods to work with it.***

**Yurii Zaretskii**, E-mail: yzar86@gmail.com

Moscow State University of Psychology & Education, Moscow, Russia

**Viktor Zaretskii**, E-mail: zar-victor@yandex.ru

Moscow State University of Psychology & Education, Moscow, Russia

Subject position of students is understood as important condition of successful learning activity and normal student's development. Report shows the data of analyses of student's position towards the learning process on different stages. Illuminates sensitive period of initiation of subject position. Gives characteristic of conditions of initiating process in learning activity and methods of support the subject position initiating process in the work on overcoming learning difficulties.

***S3.4 Method of evaluation of changing dynamics using Multidimensional model of zone of proximal development.***

**Maria Geynrikhs**, E-mail: evet@yandex.ru

Moscow State University of Psychology & Education, Moscow, Russia

The method of evaluation of changing dynamics of development while learning process is one of the most important methodological issues of reflective-activity approach. Traditionally learning process evaluates in internalized skills and knowledge. But there is the question how to evaluate dynamics of cognitive and personal changes on such vectors as self-esteem, communication, attitude to own difficulties.

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***S3.5 The unity of intellect and affect: the personal component of development in psychological-pedagogical counseling.***

**Irina Nikolaevskaia**, E-mail: have\_a\_nife@mail.ru

Moscow State University of Psychology & Education, Moscow, Russia

Understanding of unity of cognitive and personal components of development is the key in work of counselor in overcoming learning difficulties process. Report represents some cases which illustrate the connection of cognitive and personal changes.

***S3.6 Reception of Reflective-Activity approach in a Higher Education context in Switzerland: first reflections.***

**Laura Kloetzer**, E-mail: laure.kloetzer@unine.ch

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In November 2018, a first international RAA workshop, led by Prof. V. Zarestky, with I.A. Nikolayevskaya, counsellor in RAA, was run at the University of Neuchâtel, Switzerland. This workshop was dedicated to introducing the RAA approach, and training the students of the Institute of Psychology and Education in the RAA counselling approach. The workshop was opened to Bachelor, Master and Doctoral students from the Institute of Psychology and Education, based on their curiosity for this approach. Most of them had a background as teachers (primary and secondary school teachers, special needs education, teachers in out-of-school activities like Martial Arts), or were in contact with school-age children (for example, as homework assistants). The workshop raised a number of challenges: (a) although our students are trained in cultural-historical psychology, counselling as such is not a topic in Psychology and Education in Switzerland. Therefore, both the theoretical background of self-development through the multi-vector model of the zone of proximal development (Zaretskii, 2007) and the approach of counselling, as a specific way to interact and collaborate with a child, were new to the students. (b) The workshop, run in English, required translation into English and deep understanding of key concepts (like subjectness, or reflection, for example), which may be foreign to the students, as they are anchored in a long history in Soviet psychology. (c) It also required (at least initial) appropriation by the students of principles and technologies of RAA (like identifying the problem epicenter, asking reflective questions, supporting awareness or reflective fixation), which was achieved primarily thanks to collaborative close analysis of short video-recordings of counselling interventions in school settings and at Dunno. The reception by the Swiss HE students was very positive, with strong interest, the will to overcome language and conceptual difficulties, and finally a satisfying level of appropriation. This paper will present the structure of the workshop, comment on these challenges, and analyze RAA reception by Swiss students, based on their final evaluations of the workshop as well as analysis of

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their written productions reporting on their own experiences with RAA after the course. These are first reflections, which will be developed in further work.

**h. 12:00-13:30, Grande Foyer- Lobby - Conference Centre “Karolos Papoulias”**

**POSTER SESSION:**

***Visualizing Crisis within Science and Society***

**Chairs and Discussants:**

**Posters group 1:** Jenny Paggi, Ioannis Dimoliatis, Eugenia Toki, University of Ioannina, Greece

**Posters group 2:** Silvia Ivaldi & Giuseppe Scaratti, Università Cattolica del Sacro Cuore, Milano, Italy and Adolfo Tanzi Neto, Universidade Federal do Rio de Janeiro, Brazil

***PS1. The Coop4Edu project***

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**Yorgos Goletsis**, E-mail: [goletsis@uoi.gr](mailto:goletsis@uoi.gr)  
Assistant Professor, University of Ioannina, Greece

**Anastasios Mikropoulos**, E-mail: [amikrop@uoi.gr](mailto:amikrop@uoi.gr)  
Professor, University of Ioannina, Greece

**Triantafyllos Albanis**, E-mail: [talbanis@uoi.gr](mailto:talbanis@uoi.gr)  
Rector, Professor, University of Ioannina, Greece

The Coop4Edu is a project which is funded by the European Commission, under the Erasmus+ programme, Key Action 2: Cooperation for Innovation and the Exchange of Good Practices. The project started in September 2018 and ends in December 2020. The consortium consists of seven partners, the University of Alcala (Spain), the University of Leuven (Belgium), the University of Ioannina (Greece), Cooperatives Europe (Belgium), Coopetic (France), the European University Foundation (Luxembourg) and the Co-operative College (United Kingdom). The main objective of the project is to develop a supporting innovation and creativity structure aimed at enabling Higher Education Institutions to improve the relevance of their curricula and research with respect to the needs of cooperative entrepreneurs. The long-term vision of the project is to soothe endemic youth unemployment by encouraging youth entrepreneurship. However, in order to promote the cooperative model towards a larger number of young people across Europe, it is necessary to offer resources for professors to develop relevant and attractive curricula. The expected outcomes of the project are to improve access to educational resources, to foster integration of cooperative entrepreneurship among HEI curricula, establish workflows among cooperatives and HEI relations, to improve relevance of

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research and facilitate field research on cooperatives and facilitate transnational collaboration among teachers and professors on the one hand, and mentors and trainers on the other hand, to improve quality and relevance of higher education and VET. The paper presents the structure of the educational material the project foresees as well as the forthcoming project activities.

***PS2. Investigating the use of crop landraces for overcoming the crisis in remote local communities***

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**Ricos Thanopoulos**, E-mail: ricosth@aua.gr

Farm Unit, Agricultural University of Athens, Greece

**Penelope J. Bebeli**, E-mail: bebeli@aua.gr

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Crop landraces are valuable plant genetic resources which during the last decades have been abandoned rapidly due to various socioeconomic reasons. However, agronomists had reconsidered the value of crop landraces not only as a source of exotic genes but also for the production of quality goods for the sustainable development of local communities. Our present work aimed to investigate such landraces in the prefecture of Arcadia (Peloponnese), which is mainly mountainous and with a rich agricultural history. A survey was organized and up till now three missions have been carried out involving research in 18 villages. In these villages, interviews were conducted, mainly, with elderly people mainly farmers regarding the past and the present landraces cultivation and their characteristics. Moreover, seeds were collected from donors and field visits were made. Based on the information gathered we concluded that it still exists a potential of landraces for economic exploitation for the benefit of local communities. Such examples could be wheat, barley and oat landraces as well as pulses and some vegetables/fruits landraces like melon.

***PS3. Development and Modernization of Science, Technology, Engineering and Mathematics (STEM) in Education***

**Maria Tsironi**, E-mail: maria\_tsirwni@hotmail.gr

PhD Student of the Department of Preschool Education, University of Ioannina, Greece

**Jenny Pange**, E-mail: jpagge@cc.uoi.gr

Professor, Laboratory of NT and Distance Learning, Dept. of Early Childhood Education, University of Ioannina, Greece

Science, Technology, Engineering and Mathematics (STEM), is a term used to group together these academic disciplines. This term is typically used when addressing education policy and curriculum choices in schools to improve competitiveness in science

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and technology development. The increasing emphasis of engineering integration in education has been one response to the need to improve Science, Technology, Engineering and Mathematics (STEM) education development. In the frame of this literature research will be to focus on innovative technologies based in learning. In addition another, also important point of research is to signalize integration of difficult and alternative practice into smart and ingenious STEM learning environments. The main purpose of this section is to focus on a cultural-historical research approach and to identify the effects of a science, technology, engineering and mathematics on the field of education.

***PS4. Social Media as a communication tool in Crisis Management***

**Maria Tsironi**, E-mail: maria\_tsirwni@hotmail.gr

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**Effrosyni Pyrkati**, E-mail: epyrkati@uoi.gr

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**Eugenia I. Toki**, E-mail: toki@ioa.teiep.gr

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The rapid development of social media has an essential role in communication supporting of crisis management. Crises management refers to extraordinary events, but because of different nature and the different conditions they cause, there is no one definition and so the term "crisis" has many manifestations. But surely it is a no anticipated event, an unfavorable situation, a threat that has a very rapid evolution, and disrupts the smooth operation of a business organization. The crisis usually caused by anthropogenic or natural causes. However, crucial role of managing such situations are playing social media. The term "social media" refers to Internet-based applications that enable people to communicate and share resources and information, like blogs, discussion forums, chat rooms, wikis, YouTube Channels, LinkedIn, Facebook, Twitter. The aim of this study is to report on the literature findings on crisis management through social media and on the other hand to review how social media tools are used in disasters by the public, emergency organizations and academic environment. According to our findings, the implementation of social media fostered in networks management has become a global phenomenon as it has the ability to expand interaction, response evaluation, prevention, collaboration. Summarizing, this literature review revealed that during disasters crisis social media provides communication and access to relevant crucial information changing the information pathways in crisis management in emergencies.

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***PS5. Technology in diagnostic and intervention procedures of language pragmatics competence in early childhood: A literature review***

**Eugenia I. Toki**, E-mail: [toki@ioa.teiep.gr](mailto:toki@ioa.teiep.gr)

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**Vasilgia Gargala**, E-mail: [vasilia.gargala@gmail.com](mailto:vasilia.gargala@gmail.com)

Dept. of Speech and Language Therapy, University of Ioannina, Greece

Pragmatic competence refers to the proper use of language and is essential for understanding language. To achieve a communication goal, pragmatics skills include linguistic adjustments made -how something is said, speaker's intentions, participants' relationship, and cultural expectations. Pragmatic deficits have been documented in many populations. Speech and language therapists carry out diagnostic and intervention procedures to determine and enhance pragmatics competence. The aim of this study is to present the current use of technology in diagnostic and intervention procedures on language pragmatics in early childhood. The findings of the study report various uses of technology-facilitated diagnostic and intervention tools pointing out the use of video, digital story-telling, digital games, wearable tools, eye tracking together with the use of various devices such as touchscreens and other mobile devices. The use of technology-facilitated tools indicate the potential to contribute innovatively to the clinical assessment and intervention procedures of pragmatic communicative deficits offering new pathways in motivating diverse learning styles along with current technological advances.

***PS6. Digital games to enhance children's phonological awareness in rural communities***

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Phonological awareness is a critical component for reading and writing decoding skills, a metalinguistic ability of realizing the sound system in a spoken language (smaller units of sounds, such as words, syllables, phonemes). Phonological awareness helps young children to understand the sound units and how they blend together forming syllables and words. Information Communication technology (ICT) advances have noted a great impact in our society offering multisensory educational environments accessible to

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everyone. The purpose of this pilot study is to investigate the use of digital games to enhance children's phonological awareness.

Two digital games were used with tasks targeting the enhancement of Phonological awareness "Jele" and "Magic Filter" in Greek language which are available online. Using Kirkpatrick's model, a four level evaluation (reaction, learning, behavior, results) of the digital tasks were performed to ensure the learned behaviors/skills. The research was conducted in rural areas of the prefecture of Ioannina, in Greece. The sample of the study was consisted of 10 children aged from 5:5-8:0 years old. The children were observed during the digital tasks. After 5 sessions of 30 minutes long each playing the digital games, children expressed their opinion through an interview and demonstrated their acquired knowledge.

The results have shown that children were highly motivated in the digital activities, stating that they wanted to play it again. They also found these digital games interesting, fun and understood the meaning of the tasks. A detailed discussion on children's perceptions and learning outcomes is included, demonstrating alternative paths to enhance today's active learning at times of social and economic crisis.

***PS7. Digital games as tools for preserving and transmitting cultural and historical heritage: A Case Study***

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Cultural and historical heritage is a precious, unique and irreplaceable asset for every place in the contemporary world. This spots the responsibility on modern society to safeguard and preserve it, as well as to convey it to the next generations. The ability of digital games to act as virtual learning environments as well as tools for the dissemination of cultural heritage, has already been extensively documented, but their use in this scientific area remains limited. This study concerns the evaluation of two new digital games of historical and cultural content. These are named "Secrets of the past DION" and "Polis Kratos ATHENS" both designed by "Culturplay". The games were randomly selected and are addressed to adults and children. They are designed for mobile devices

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and PCs and include views of high-quality 3D reproductions of ancient Greek artefacts. For these two games we used the four criteria of the "Kirkpatrick, 06" model, for evaluation. The criteria were: Reaction, Learning, Behavior, Results. We found that the specific digital games meet the above mentioned criteria. In conclusion, digital games of cultural historical content, consist alternative and exciting means that seem to be able to disseminate the cultural-historical heritage of a country.

***PS8. Can visually impaired adults use social media via their mobiles?: A case study***

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There is a great interest nowadays about the use of social media by visually impaired people. A few years ago, almost 40% of the population worldwide appeared to be connected to the internet, which makes web-based activities as an integral part of social inclusion. Socio-cultural inclusion is a key component of the term "independent life", advocating equal accessibility, same opportunities and choices on a daily basis for everyone. Nowadays, considering the anticipated economic and cultural crisis of our days, the social network offers one of the most affordable ways of communication, eliminating time and distance. It is well-documented that approximately 1.3 billion people worldwide live with some form of vision impairment. The purpose of this study is to present the views of 2 visually impaired individuals about the use of social media. According to the interviews, mobile devices give the opportunity to visually impaired people via accessibility services to get socially involved and act independently, however with some general accessibility challenges. Specifically, photo content prevalence in social media without sufficient text descriptions for the visually impaired, emphasize the social significance of photo content-based interactions posing new design practises for equal social inclusion.

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***PS9. A Comparison of ICT use in Portugal and Greece***

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The use of ICT in pre-school in Portugal and Greece has shown significant growth in recent years and several similarities are found at different levels. Educators from both countries make ICTs accessible to children on a frequent basis, with computers being the most important tool. In general, access to this is done weekly by all children. The MS Paint program, CD-ROOMS, including here also educational software, and MS Word are the most frequently used programs in the context of kindergarten. The familiarization of children with the computer and the educational benefits are also in both countries identified as the main objectives of ICT integration. From the analysed studies we see that there is no specific reference to the use of online games in the context of kindergarten, however, we realize that these are rather used and that are included in the category of "educational software". Educators of both nationalities consider these important learning tools, which are applied or to work on specific concepts or as a "reward" in the free time after the tasks, depending on their nature. From the research carried out, we can conclude that the theme of internet security is not a topic addressed in pre-school in Portugal, but only from the first cycle of basic education. Contrastively, in the case of Greece we find at least one case study in which the topic of digital surveillance with pre-school children is worked on.

***PS10. Greek Family in Crisis: Parental Acceptance-Rejection in Early Childhood***

**Artemis Giotsa**, E-mail: agiotsa@uoi.gr

Associate Professor of Social Psychology, University of Ioannina, Greece

**Eleftheria Mitrogiorgou**, E-mail: me-elftheria@hotmail.com

University of Ioannina, Greece

In Rohner's Interpersonal Acceptance-Rejection Theory/IPARTheory, the Warmth dimension of parenting is a continuum with parental acceptance marking the one end and parental rejection the other. Even if most of the studies were addressed to children older than 7 years old, in 2012, the Theory expended also in the research of early childhood. The present research aims to study the perceived parental acceptance-rejection in early childhood, addressing the question of statistically significant differences among the

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perceived maternal and paternal acceptance and rejection, as per child's gender and family crisis. Data was collected from 550 children (48.9% male, 51.1% female), living in different regions in Greece (43.6% in Attica, 28.2% in Northern Greece, 25.3% in Central Greece, 2.9% Crete and Aegean islands). The respondents' mean of age was 4.91 years (SD=.559). The participants completed the Greek version of the Early-Childhood Parental Acceptance-Rejection Questionnaire, for the mother and the father. Based on the model proposed by former researches, a 3-factors approach was used in the data analysis. In the results' section of this presentation, we discuss statistically significant differences revealed between maternal and paternal acceptance-rejection, as per the age of the participants and as per the experience or not of crisis within the family context.

***PS11. Breastfeeding Support Groups in Ireland: A mixed methods investigation from a Cultural Historical Activity Theory perspective***

**Elizabeth McCarthy Quinn**, Email: [quinne12@tcd.ie](mailto:quinne12@tcd.ie)

The School of Nursing and Midwifery, Trinity College Dublin, Ireland

Irish breastfeeding rates remain the lowest in OECD. Breastfeeding Support Groups (BSGs) deemed effective but women's views not well reported. The aim of this study is to investigate the role and impact of BSGs from mothers' perspectives; explore experiences; determine knowledge and use of BSGs; and assess Breastfeeding Self-Efficacy (BSE). A Sequential Explanatory Mixed Methods Design with Cultural Historical Activity Theory (CHAT) was used as theoretical framework. An online survey was conducted (Phase 1, N=978 and Phase 2, N=412, followed by semi-structured interviews (N=15) analyzed using thematic analysis. Findings showed that majority first contact BSGs to 'meet other mothers' (n=247, 29.8%), rather than a problem (n=196,23.6%). Small, positive correlation between breastfeeding length and 'mothering support',  $r_s=.09, n=620, p=.025$ , and 'help other mothers'  $r_s=.15, n=627, p<.01$ . Participants had high BSE (58.1) which did not increase over time  $z=-1.296, p=.195, r=-0.06$ ). BSGs help normalise mothers' breastfeeding experiences in Ireland, perceived as a nonbreastfeeding culture. Mothers felt duty-bound to 'pass on' their knowledge and experiences. BSGs provide a social outlet, fostering inclusion through sharing of 'food and refreshments' and experiences. Personal breastfeeding experience, knowledge and training highly valued with health professionals perceived lacking these qualities. Women interact with many BSG formats with online support supplementing face-to-face BSGs with its own complex 'sub-culture'. Mothers attend BSGs to 'meet other mothers', enjoy the social aspect of sharing food, experiences, and creating friendships. Breastfeeding supporters act as role models with their skilled support and practical help leading to mothers achieving, and exceeding, their own goals. Mothers may need to be highly self-efficacious to breastfeed in a perceived non-breastfeeding culture.

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***PS12. Family Values in Modern Greece***

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Associate Professor of Social Psychology, Department of Early Childhood Education, University of Ioannina, Greece

**Savela Poulianou**, E-mail: spoulian@cc.uoi.gr

PhD Candidate, Department of Early Childhood Education, University of Ioannina, Greece

Values are defined as beliefs consisting of clear or implied arrests of the desirable, which are the deepest desires of a society. Values define the choice of means and patterns of action and play a central role in the system of beliefs of individuals and groups.

The main goal of this research is to explore the values of the Modern Greek families as they have been shaped through the last decades. For the purpose of this survey, we used the questionnaire of Family Values, which includes 18 proposals concerning family values related to the Greek traditional family. The questionnaire explores the hierarchical roles of father and mother and the relationships between family members and relatives. These are the family values associated with the roles of an extended family.

The sample of our survey consists of 667 parents of pre-school children, aged 25-55 from many urban cities of Greece. 28.3% of the sample were men with an average age of 40.0 ( $\pm 6.2$ ) years and 71.7% women aged 36.4 ( $\pm 5.4$ ) years.

The results of the survey showed that respondents reject the gender hierarchy, specifically between father and mother role. Moreover, respondents agreed that the family members should maintain good relations with their relatives and also children should take care of their parents when they become old.

***PS13. Industrial foods and healthy diet: do they go together?***

**Christina Piperidi**, E-mail: chpiperi@cc.uoi.gr

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Department of Chemistry, University of Ioannina, Greece

Within the framework of a Ph.D. thesis in chemistry education, chemistry students' knowledge and views were sought about the chemical constitution of industrial foods, their nutritional value, as well as the purpose, the necessity and the possible bad effects on health as a result of the use of chemical additives in these foods. The topic of the thesis belongs to the so-called "relevant chemistry education", which originates in the instructional program of the famous American philosopher, psychologist and education reformer John Dewey. In the present proposal we present part of the findings, concerning students' views about the content of industrial foods as described in the labels of these

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food, as well as their views and knowledge about healthy diet and the basic constituents of foods. The study was carried out in academic years 2014-15 and 2015-16 with students attending the compulsory practical course on “Analysis and Technology of Foods”. This course is taught in the 6th semester (3rd year) of the chemistry major program, consisting in total of eight semesters (four years). A total of 249 students had attended the above course of which 223 students answered two written optional written questionnaires each (response rate: 89.6%). 83 of the students were males (37.2%) and 140 were females (62.8%). The students had been informed in advance about the research nature of the study, their voluntary participation and the fact that no effect whatsoever would carry their participation or non-participation to their overall evaluation and grading of the course.

**h. 15:00-16:00, Room A- Lobby- Conference Centre “Karolos Papoulias”**

**KEYNOTE 2:**

*Research Partnerships and CHAT as a praxis in the field: giving voice to the emotional experience of participants to understand the expansion of a transformative activity*

**Sylvie Barma**, Email: [sylvie.barma@fse.ulaval.ca](mailto:sylvie.barma@fse.ulaval.ca)  
Université Laval, Quebec, Canada

**Chairs:**

Katerina Plakitsi, ISCAR President, Professor, University of Ioannina, Greece  
Marika Syrrou, University of Ioannina, Greece  
Petros Maragkos, University of Ioannina, Greece

We will share and reflect on issues encountered while implementing CHAT in praxis during a seven-year research partnership between our university, the Ministry of Education and a school district. The setting of the crisis in the context we address is rooted in the implementation of a top-down science curriculum where most teachers resist engaging in professional development. Giving voice to the emotional experiences of the participants and documenting expansive resolution of conflicts of motives led us to understand how agency emerges and is key to the transformation of professional development of teachers and other members of the school community. Some answers could help us to better understand relations between emotions, agentic transformative actions and the concept of perezivanie as an act of experiencing in praxis.

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**h. 16:00-17:30, Room B – 1<sup>st</sup> Floor - Conference Centre “Karolos Papoulias”**

**SYMPOSIUM 4 (Part 1):**

***The crisis as a lectic description, but also as a construction, in the modern Greek and foreign mass media***

**Chair & Organizer:** Nikoletta Tsitsanoudis – Mallidis, University of Ioannina, Greece

**Discussant:** Nikoletta Tsitsanoudis – Mallidis, University of Ioannina, Greece

The thematic symposium “The crisis as a lectic description, but also as a construction, in the modern Greek and foreign mass media” researches and analyzes the use and functions of language in the depiction of the economic crisis of Greece in recent decades, especially after the so-called "Memoranda of Cooperation". The analysis concerns traditional and modern journalistic texts and is done according to the principles of Critical Language Analysis.

Directors and managers of major Greek and foreign newspapers, television stations and information sites are developing their positions on the various representations of the economic crisis in Greece at an inter-language level and a cross-linguistic level, with a central axis in the media. The analysis is based on a multitude of very recent published texts from the Internet and the printed or electronic press. Among the issues that concern the research approach, are both the types of speech chosen and the representations used for the descriptions of the crisis, and the primary functions of the language that are emerging, such as descriptive and expressive, on the other. The semantic level attempts to reveal the way in which the ideological functions of language, such as power and propaganda, are performed.

As noted in these texts, the economic situation in Greece and its ugly effects are verbalized through nominal and verbal structures. The rotation of structures is due to the different communication intentions of designers and producers of journalistic texts. Sometimes it depicts the serious involvement of the "victim" of the people in the painful experience of the crisis, and sometimes the function of speech is merely descriptive. In general, the crisis is represented linguistically as a personalized hypostasis that worries and threatens almost all of Greek society, and not in isolation any part of it.

***S4.1 The Rhetoric of Hate in journalism and in the public sphere at the time of the crisis***

**Eirini Giannara**, E-mail: [igiannar@gmail.com](mailto:igiannar@gmail.com)

PhD Candidate in Communication, Department of Communication and Mass Media, National and Kapodistrian University of Athens, Journalist – Head of the Department of Creative Design, General Directorate of Radio, ERT. S.A.

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The political speech and the public, consequently, journalistic speech were especially tested during the crisis, revealing to a large extent the pathogens of the political and journalistic system. What happens when politicians fold at the level of populism? What happens when a media reports for the sole purpose of profit or influence, without counting responsibility towards the public sphere? Where are citizens led when they become the channels of false news and intolerant speech, to their knowledge or ignorance?

***S4.2 Economic language in understanding the Greek crisis***

**Konstantina Dimitrouli**, E-mail: kdimitrouli@gmail.com

Doctor of International Economic Relation, University of Macedonia, Journalist at ERT

The Lehman Brothers crisis and its expansion to the European market and then to Greek reality, by its own financial nature, imposed the use of terms and concepts of economic science that would, under different circumstances, be confined to either the amphitheaters of Universities or in the discussions and placements of specialized scientists. Both the media and the Greek public have been invited not only to understand these terms in depth, but also to use them in the most correct way, since their misinterpretation has had serious economic, political and social implications. These impacts, as well as the responsibility of the media and its understanding by the public, will be presented through the presentation of the book "Together we talk".

***S4.3 The performance of the journalists and the acceptance of the general public of new memorandum terms and concepts in everyday practice***

**Giannis Keisoglou**, E-mail: gkeisoglou@yahoo.gr

Journalist/Columnist 'Proinos Logos of Ioannina', Radio Producer 'ECHO 102,7', Reporter 'Real FM'

The Memorandum, besides the change that has brought to the daily life of citizens, has also forced systemic media to adapt and adopt new terms and concepts (although in some cases they invented others), which in turn should make popular or even adapt, in order to inform or otherwise "serve" the policy of the memorandum. There have certainly been cases of media that have stood up against, and of others that have adopted a neutral policy.

***S4.4. The crisis as a virtual construction and as a 'disaster'***

**Katerina Mpregianni**, E-mail: kat.bregianni@gmail.com

Journalist 'AVGI' Newspaper, Editor-in-Chief avgi.gr

In the beginning, the economic crisis was presented as an unavoidable disaster. The media completely disconnected the causes from the effect, concealing the responsibilities of the political system and incriminating the Greek people. They produced news-stories in order to convince them of the necessity of the austerity measures imposed on the country, while hiding others that were describing their social consequences.

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**h. 16:00-17:30, Room A- Lobby- Conference Centre “Karolos Papoulias”**

**PAPER SESSION 1:**

***Inclusion and special needs at times of the crisis***

**Chairs:**

Harry Daniels, University of Oxford, United Kingdom

Ian Thompson, University of Oxford, United Kingdom

Svetlana Jovic, State University of New York College at Old Westbury, New York, United States

***P1.1 A cultural historical analysis of the policy, practice and prevalence of permanent school exclusion in the United Kingdom***

**Harry Daniels**, E-mail: [harry.daniels@education.ox.ac.uk](mailto:harry.daniels@education.ox.ac.uk)

University of Oxford, United Kingdom

**Alice Tawell**, E-mail: [alicie.tawell@education.ox.ac.uk](mailto:alicie.tawell@education.ox.ac.uk)

University of Oxford, United Kingdom

**Ian Thompson**, E-mail: [ian.thompson@education.ox.ac.uk](mailto:ian.thompson@education.ox.ac.uk).

University of Oxford, United Kingdom

Permanent disciplinary school exclusion is both an outcome of disadvantage and a cause of social and economic inequalities. It can lead to disaffection, social fragmentation and even conflicts. There are large disparities in the official rates of school exclusion across the four jurisdictions of the United Kingdom. Permanent school exclusions have risen alarmingly in England since 2014 in stark contrast to the other UK jurisdictions e.g 7, 720 in England and five in Scotland in 2016-17. Very little is known about the reasons why the four nations differ so greatly. Since democratic devolution there have certainly been increasing divergences in education policy. But there may also be divergent practices in the use of unofficial or illegal practices of exclusion. Across the UK policy reforms have been underpinned by dual-commitments to accountability and inclusion. However, in contrast to Scotland, and to some degree Northern Ireland and Wales, commitment to accountability appears to override practices of inclusion in England. Moreover, policy discourse in England has tended to individualise reasons for exclusion rather than develop an understanding of exclusion in the wider context of education and social policy. This paper will attempt to unravel some of the cultural and historical processes which lie behind the disparities through examining and comparing emerging evidence from each jurisdiction and data from some preliminary investigations with key stakeholders. Our exploratory cross-jurisdictional research suggests that multi-disciplinary perspectives can provide insights into exclusion as a cultural and historical process and highlight mismatches between needs and provision.

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***P1.2. Calling it out, or playing it down: Youth from Differently Privileged Backgrounds Narrate about Injustice***

**Svetlana Jović**, E-mail: JovicS@OldWestbury.edu

Ph.D, Assistant Professor, Developmental Psychology, Department of Psychology, State University of New York College at Old Westbury, New York

This study explores how socioeconomic background informs the sense that adolescents make about injustice and the way they communicate it. Among other questions, I explore how diverse youth make meaning about unfairness as they narrate from the positions of a plausible wrongdoer and an alleged victim of unspecified exclusion.

The study involved 63 adolescents of high-school age, recruited from poor, working, and middle-class neighborhoods of New York City, USA. Narrative as a sense-making tool was used as the data collection/production and analysis approach. Youth's narratives were elicited as responses to a vignette they read, depicting an ambiguous social situation in which occurrence(s) of injustice might have occurred. Using an array of narrative analyses—from the content to inductive analysis—I explored how explicitly adolescents from different socioeconomic (as well as racial/ethnic) backgrounds wrote about injustice.

Adolescents from lower SES were more likely to read injustice in the ambiguous story they were presented and to talk about it more directly by appropriating more thoroughly the positions of the perpetrator and the object of injustice (when invited to occupy and narrate from these positions). In addition, they used more than twice as many injustice related expressions than their more privileged counterparts. In the light of these finding, I will discuss the relationship between the power that comes with one's position in a society and a critical perspective it offers over situations involving power issues.

***P1.3. Change Laboratory on STEAM Subjects for an Inclusive Framework***

**Dimitrios Tsiastoudis**, E-mail: tsiastoudis@gmail.com

Deaf and H.O.H. School, Greek Ministry of Education, Thessaloniki, Greece

**Hariton M. Polatoglou**, E-mail: hariton@physics.auth.gr

Physics Department, Aristotle Univ. of Thessaloniki, Thessaloniki Greece

The aim of the present work is to present a case study of an expansive learning process on fields of Science, Technology, Engineering, Arts and Mathematics (STEAM) in which we focused on educational and socio-cultural skills of students with hearing disabilities. From literature, it becomes evident the low participation of students with disabilities in subjects related to STEAM education. As for deaf people this may due to the absence of sign language terms and concepts related to STEAM activities. Taking in mind socio-cultural approaches we formed a Change Laboratory (CL) method course, where our inhomogeneous target group of K6-12 students (including students with hearing disabilities) took part in an expansive learning process. We used the Arduino platform and our approach is based on the activity theory of constructivism, principles of the learning communities and the differentiated instruction. Four short, authentic problem

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projects were used, i.e. construction of a traffic light, reaction time counter, Theremin, and search for exoplanets. Collaboration between the practitioners transformed, when aspects of the activity came out of the proximal development zone. In parallel the researchers gave support and facilitated collective developmental processes. We recorded their actions, scheduled or spontaneous, and the conditions of change, by interviews, video recordings and filling observation forms. We describe the difficulties that occurred, and the necessary adaptations in sign language terms, aiming at enhancing the accessibility of the chosen electronic devices. One of the authors worked as an interpreter for the GSL. Deaf students achieved comparable results, proofing that they acquired the anticipated skills and attitudes for such a complex process. Although it required a laborious and very detailed work on behalf of the teacher and a pertinent research on the occurred conceptual development is required, socio-cultural approaches show that they can form the base for redesigning inclusive teaching.

***PI.4 Parents of children with learning difficulties: Can they be involved?***

**Eleni Morfidi**, E-mail: emorfidi@cc.uoi.gr

Department of Primary Education, University of Ioannina, Greece

**Beatrice Bridglall**, E-mail: Bridglall@exchange.tc.columbia.edu

Teachers College, Columbia University, New York, USA

The purpose of the present study is to illustrate the importance of parental involvement in students' with special educational needs learning and school achievement. The focus is on special educators' perspectives and their understanding of parental involvement as well as their actions in fostering or promoting increased involvement of parents with children who experience learning difficulties. These dynamics have important implications for student learning and development when we consider the importance of coordinated school, family and community partnerships. Their collaboration may not only support the schools' goals but also strengthen schools, families and communities, which in turn contribute to student achievement and success. The study examined the perceptions of twenty special education teachers who are currently teaching in primary schools in Greece, in efforts to understand how they perceive their role as educators and the role of their schools, in making parental involvement possible for this population of students. Semi-structured interviews with open-ended questions have been conducted and qualitative data analysis followed. The emerging themes suggest that special education teachers are aware that parents play an important role in their children's education and that there are significant benefits from parental involvement. Furthermore, special education teachers and other professionals within the school environment, share a responsibility for enabling parental involvement. Besides, they need to understand the reasons why parents do not become involved. The implications are further discussed in the light of inclusive practices and current developments in special education.

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**h. 16:00-17:30, Meeting Room-1<sup>st</sup> Floor- Conference Centre “Karolos Papoulias”**

**WORKSHOP SESSION 1:**  
*Knowing my Friend (Fine Arts)*

**Yiannis Christakos**, E-mail: [yiannischristakos@hotmail.com](mailto:yiannischristakos@hotmail.com)  
Assistant Professor, University of Ioannina, Greece

Student heterogeneity is a special feature of today's classes, as children bring to them a variety of languages, cultural traditions, skills and interests. In this context, knowledge of the "other" is vital to managing diversity but also to preventing anti-social behaviors and crises in the modern classroom. The arts could be an ideal means to explore human diversity.

Research using arts as a means in the learning process has brought academic, social and personal benefits to students. The main objective of this workshop is to challenge teachers to redefine their educational strategies using the arts as an ideal tool to address the diversity of students.

The seminar takes place in two days. It is aimed at educators, students and professionals in education. Participants are divided into pairs in such a way that the heterogeneity between them is ensured (e.g. gender, culture, cognition, etc.) On the first day they are asked to sit opposite one another, to carefully observe the features of the person facing each other and to build the facial features creating a sculpture. On the second day they paint and exchange their sculptures.

The aim of the seminar is for each participant to conceive and represents the identity of the other person in order to "know" and accept his or her individual differences. The potential benefits to those involved in the above process are to improve their skills and visual perception in order to appreciate the other's personal characteristics and to accept their differences, to develop relationships and to better understand their image through the eyes of others. Critical learning, communication and expression through the arts can help create a dynamic positive environment in the classroom where students will be psychologically resilient to prevent and effectively cope with crises.

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**h. 18:00-19:30, Room B – 1<sup>st</sup> Floor - Conference Centre “Karolos Papoulias”**

**SYMPOSIUM 4 (Part 2):**

***The crisis as a lectic description, but also as a construction, in the modern Greek and foreign mass media***

**Chair & Organizer:** Nikoletta Tsitsanoudis – Mallidis, University of Ioannina, Greece

**Discussant:** Nikoletta Tsitsanoudis – Mallidis, University of Ioannina, Greece

The thematic symposium “The crisis as a lectic description, but also as a construction, in the modern Greek and foreign mass media” researches and analyzes the use and functions of language in the depiction of the economic crisis of Greece in recent decades, especially after the so-called "Memoranda of Cooperation". The analysis concerns traditional and modern journalistic texts and is done according to the principles of Critical Language Analysis.

Directors and managers of major Greek and foreign newspapers, television stations and information sites are developing their positions on the various representations of the economic crisis in Greece at an inter-language level and a cross-linguistic level, with a central axis in the media. The analysis is based on a multitude of very recent published texts from the Internet and the printed or electronic press. Among the issues that concern the research approach, are both the types of speech chosen and the representations used for the descriptions of the crisis, and the primary functions of the language that are emerging, such as descriptive and expressive, on the other. The semantic level attempts to reveal the way in which the ideological functions of language, such as power and propaganda, are performed.

As noted in these texts, the economic situation in Greece and its ugly effects are verbalized through nominal and verbal structures. The rotation of structures is due to the different communication intentions of designers and producers of journalistic texts. Sometimes it depicts the serious involvement of the "victim" of the people in the painful experience of the crisis, and sometimes the function of speech is merely descriptive. In general, the crisis is represented linguistically as a personalized hypostasis that worries and threatens almost all of Greek society, and not in isolation any part of it.

***S4.5 The titles on the internet during the recession. Addiction to dramatization and exaggeration***

**Natasa Spagadorou**, E-mail: [nspagadorou@gmail.com](mailto:nspagadorou@gmail.com)

Journalist/Columnist CNN.GR

In the years of Greece's biggest post-war crisis, much has changed and a lot eroded. The Greeks were called upon to manage unprecedented situations at the economic and social level. We could even say that our language has almost changed: Memorandum,

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Memorandum program, Poul Thomsen, exiting, austerity, recession, deficit, inequalities, were words we used almost everyday. By saying ‘memorandum’ and ‘recession’, for example, we knew that wages declined and we blinded our neighbor to the eye ... It is consequent for the journalists (who eloquently depict the everyday life) to write and talk with new facts. Besides, let’s not hide, a negative piece of news sells always well, and this is where balance is needed. The question is whether what we wrote, or what we said and stated, did depict all the reality.

#### ***S4.6 Depicting the crisis in the Regional Press***

**Christos Mpechlivanos**, E-mail: bechlivanos@gmail.com

Larissa net, former President of the Association of Editors in Thessaly, Evoia, Central Greece.

The crisis in Greece over the last eight years, at the time of the memoranda, coincided with the technological -internet-revolution in the media, putting the Regional Press in an unprecedented crisis and at the same time in a top renaissance challenge. Traditional clusters have been shut down or shrunk considerably as if they were part of the problem, while bank cash flows have been reduced or resettled to information groups along with development finance tools. At the same time, new press businesses in the Greek region flourished, leaving their own footprint in the "stone years" of journalism, while the algorithms came to fill the gap in the "filtered" reader information options.

#### ***S4.7 Brussels, Athens, Ioannina, round trip. The local press in the vortex of the memorandum***

**Filimon Karamitsos**, E-mail: info@ele.gr

Editor in the Newspaper ‘Eleftheria of Ioannina’ and the TV station ‘Ioannina TV’, correspondent for the newspaper ‘Efimerida ton Sintakton’

The press of the region, as the voice of the local community, was called after 2010 to explain what the adaptation programs were, that were to be implemented in the country, with the local experience being mixed with the national and European. At the same time, what happened locally had to be transposed as news, with the aim of wider information and aiming to the social cohesion. This lasting, two-way situation of convergences and divergences, and of interconnection between the local and the central, required a new language from the beginning, as well as new ways of journalistic approach.

#### ***S4.8 Professional journalism and social economy in times of crisis***

**Giorgos Tsantikos**, E-mail: gtsantikos@gmail.com

Journalist

Greek media and especially the people working in them, embed the recent crisis and recession. Employees are the victims of circumstances: raging unemployment, either evident or concealed, plague the job. The big picture is disheartening: Media that employ

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only one or even no professional journalists, that operate with “hobbyists”, and the few professionals left are poorly paid. Readers are in no better condition.

The concept of information comes down to an occasional reading of the titles on the Internet, investigative journalism is abandoned, "fake news" is constantly gaining space. In this context, is there a way out for professional journalism? In 2011 the first legal framework on social economy was introduced in Greece.

An important number of employees has resorted to this corporate model to self-manage their survival and the survival of journalism. But is social economy really a way out?

**h. 18:00-19:30, Room A- Lobby- Conference Centre “Karolos Papoulias”**

### **PAPER SESSION 2:**

***Science, Technology, Engineering, Arts and Mathematics Education in a cultural historical context***

#### **Chairs:**

Konstantinos Kotsis, University of Ioannina, Greece

Maria Kaldrimidou, University of Ioannina, Greece

Hariton Polatoglou, Aristotle University of Thessaloniki, Greece

#### ***P2.1 Addressing the Didactics of Natural Sciences at All Three Education Levels in Greece***

**Konstantinos T. Kotsis**, E-mail: [kkotsis@uoi.gr](mailto:kkotsis@uoi.gr)

Dean of School of Education, Department of Primary Education, University of Ioannina, Greece

Many educational systems around the world have long recognized that being a great teacher and mastering a science are two separate matters. This apprehension has led to the development of didactics as a scientific discipline with overarching principles and various specialized application areas, such as the didactics of natural sciences, mathematics, literature, English as a second language, etc.

In this paper, we illustrate the specific challenges of teachers with the didactics of natural sciences across all three Greek education levels. Firstly, we note that, in Preschool and Primary Education, all involved actors pay a great deal of attention on teaching the physical sciences. In contrast, in the second level of education, Gymnasium and Lyceum, few teachers only have specialized in the didactics of science. In general, teachers are left to fill in their knowledge gaps at their discretion due to the absence of any systematic way targeting the improvement and innovation of their pedagogical methods. Finally, in Higher Education, the didactics of natural sciences exists as a stand-alone subject only in the Pedagogical Departments of Primary and Preschool Education. The same holds for all other didactics as well. Specifically, in any of the Departments of Physics, Chemistry,

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or Biology, didactics is absent on the research and the teaching front altogether. Therefore, graduating students from these departments find themselves lacking basic knowledge and skills in effective teaching methods in the classroom. We conclude that, unfortunately, the recent denial of these departments to integrate didactics formally into their curricula enhances nonscientific approaches and attitudes, which might deteriorate the effectiveness of the Greek educational system as a whole.

### ***P2.2 Nature of Science (NOS) and Cultural-Historical Activity Theory (CHAT)***

**Anna Koumara**, E-mail: anniekmr@gmail.com

PhD Student in Science Education, Department of Early Child Education, University of Ioannina, Greece

**Katerina Plakitsi**, E-mail: kplakits@uoi.gr

Professor, University of Ioannina, Greece

The present work tries to present the characteristics of scientific knowledge through the framework of cultural historical activity theory (CHAT). Scientific knowledge could be the object of the activity system, while the special characteristics of science (nature of science – NOS) could arise through application of two (at least) activity systems: one between scientists (subject), scientific knowledge (object) and the scientific community and the other between scientists (subject), scientific knowledge (object) and society (community). Another community could be the community of philosophers. Tools, rules and division of labour are defined. Besides, according to Roth et al., CHAT is a “cross-disciplinary framework for studying how humans purposefully transform natural and social reality, including themselves, as an ongoing culturally and historically situated, materially and socially mediated process”. Scientists, as human beings, belong to more than one activity system, acting and interacting through them, performing transformations both to themselves and to society/scientific community.

Finally, the five principles that according to Barma summarize the 3rd generation of CHAT are linked to the seven aspects of nature of scientific knowledge, eg. contradictions, defined as “historically accumulating structural tensions”, could be linked to critical experiments that cause transformations and evolution to scientific theories.

### ***P2.3 Teachers' Role in the Management of Mathematical Knowledge: An Analysis of a Problem-Solving Process***

**Maria Kaldrimidou**, E-mail: mkaldrim@uoi.gr

Professor, University of Ioannina, Greece

How pupils interpret the mathematical meaning of a problem, and how the teacher reacts to the different meanings; how s/he helps the pupils to reconsider the problem and its mathematical meaning, without "telling" them the solution and without “taking on” him/her the mathematical knowledge are central issues for research. From this perspective, two are the basic issues of importance for research in mathematics education:

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the choice and the formation of the mathematical content and the organization of the mathematical activity within the classroom.

The present study deals with a problem solving process in the early grades (5 and 6 years old). It is a case study and the analysis focuses on the teacher's role in the management of the mathematical knowledge in an attempt to identify the elements that led to the successful outcome of the process.

Data analysis focuses on pupils' mathematical behavior and the teachers' management of the mathematical knowledge during the problem solving process. The analysis reveals two factors that seem to play an important role in the devolution of the problem and consequently in the construction of the pupils' mathematical knowledge. The former is related to the fact that pupils evaluate the outcome of the solution process themselves; and the second one to the fact that the teacher facilitates the pupils without reducing the mathematical meaning and the cognitive demands of the task.

#### ***P2.4 Music Education in crisis' situations: the perspective of Activity Theory***

**Theocharis Raptis**, E-mail: charisraptis@yahoo.com

Assistant Professor, University of Ioannina, Greece

In every discussion about music education the main problem and also the main challenge concerns complexity. In exploring this complexity a first systematic step could be to focus on the two main components, that is music and education. These diverse musical behaviors and their development do not occur in a vacuum. They should be understood as a complex interaction between biological, developmental and environmental factors. Education, teaching and learning are also always situated and defined from an historical and cultural framework. Therefore, music educational research should take into account methodological approaches which afford a holistic perspective. Activity theory could be a suitable methodological instrument for this area of research. Especially the more extended model of an activity system, provided by Engeström, could be an appropriate lens to explore music educational situations as activities. The focus on one of the components in this system, for example “community”, will explain some of the most important functions in music education and will highlight the “praxial” nature of music education, according to the theoretical approach of Thomas Regelski. In this way, music education becomes appropriate for crisis situations and functions as a form of simulation for the unforeseen of life.

#### ***P2.5 Technological mediation in the creation of cinematic artifacts: An analysis of tensions in contemporary cinematography***

**Ilias Karasavvidis**, E-mail: ikaras@uth.gr

Assistant Professor, Dept of Preschool Education, School of the Humanities, University of Thessaly, Greece

Christopher Doyle, one of the most acclaimed contemporary cinematographers, did not mince words when discussing the academy award that fellow cinematographer, Claudio

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Miranda, had received for his work on Ang Lee's "The life of Pi": "I think it's a f\*\*\*\*\* insult to cinematography....". For almost a century, cinematography was the domain of cinematographers. In traditional cinematography, an object needed to be actually present on the scene in order to be filmed. Once captured on film, its appearance could no longer be changed. Nowadays, digital cinematography affords unprecedented freedom: an object does not even have to be on the scene during principal photography. Furthermore, even if an object is actually present on set, its appearance can be changed after it has been captured. Digital technology has reshaped the craft of filmmaking to such an extent that the final visual images are no longer under the exclusive control of cinematographers. Technology has radically redefined how a filmic object is created, both in terms of the new digital tools and workflows and in terms of the new forms of professional expertise required. The present paper uses document analysis of various sources (e.g. American Cinematographer; interviews; scholarly publications) to examine the changing cinematography practices of the last decade. Cultural-Historical Activity Theory is used as a framework to (a) provide an account of filmic artifacts as activity objects, and (b) identify the tensions arising in this activity system, both within the object of activity and between the components of the activity system.

**h. 18:00-19:30, Meeting Room and Foyer-1<sup>st</sup> Floor- Conference Centre "Karolos Papoulias"**

**WORKSHOP SESSION 2:**

*For a functional "deconstruction" of the musical performance*

**Yorgos Kokkonis**, E-mail: gkokkonis@gmail.com

Musicologist, Associate Professor, Department of Music, University of Ioannina

**Dimitris Baslam**, E-mail: dimitrisbaslam@gmail.com

Composer-musician

The principal aim of the lecture-seminar is a new proposition for an innovative method of teaching and realization of the musical performance. Although in a context in which the active participants are not excluded on the canon of the usual prerequisite musical skills but, on the contrary, are activated in the dynamism of the group with different performing roles. The advantage of the operation will give an impulse to an active engagement of everyone in the collective musical act and experience without the "skill" distinctions that suspend participation.

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**h. 10:00-11:30, Room A - Lobby - Conference Centre “Karolos Papoulias”**

## **SYMPOSIUM 5:**

*Engaging into STEAM as a cultural historical approach and promote interdisciplinary education to empower the social responsibility of younger generations*

### **Chairs & Organizers:**

Sylvie Barma, Université Laval, Quebec, Canada

Katerina Plakitsi, University of Ioannina, Greece

### **Discussants:**

Margarida Romero, Universités de Nice Sophia Antipolis et Côte d'Azur, France

Thomas McCloughlin, Dublin City University, Ireland

Alexander Cooper, Université Laval, Quebec, Canada

The thematic event is represented by the thematic section ISCAR-STEAM within the ISCAR community. It aims to promote communication and cooperation between academics, researchers, teachers and professionals, who want to contribute to dialogue around researches and practices in the area of STEAM Education. During the symposium, we will explore a variety of questions, problems, methodologies and practices in the traditions of cultural-historical activity theory, invoking the study of crisis in the past, present and future through the prism of cultural-historical activity and research.

We see this thematic event as an opportunity to share ideas around ways to overcome some crisis we face in Education in the 21st Century and explore how STEAM can offer grounds to integrate the teaching and learning of social studies like geography, health education and physical education as a means to empower students to overcome challenges they face today. In doing so, we propose a discussion around the importance of the socio-historic-cultural aspect of science education considered a human activity.

Our proposition also aims to enrich the field of research in STEAM education with a strong sociocultural perspective and its potential impact on institutional policies for the benefit of enhancing creativity, the management of risk and critical thinking skills among citizens. We invite participants to share their views on relevant studies that may cover a wide range of topics and situations: both inside educational institutions (from the early childhood till university, including teachers training), and in all societal “informal” settings.

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***S5.1 Science, Technology, Engineering, Arts and Mathematics in a Cultural Historical Context***

**Katerina Plakitsi**, E-mail: kplakits@uoi.gr

Full Professor, ISCAR President, University of Ioannina, Greece

**Eleni Kolokouri**, E-mail: ekolokouri@gmail.com

PhD, University of Ioannina, Greece

**Eftychia Nanni**, E-mail: e.nanni@hotmail.com

PhD, University of Ioannina, Greece

**Athina C. Kornelaki**, E-mail: athinako91@yahoo.com

PhD, University of Ioannina, Greece

**Eftymis Stamoulis**, E-mail: efstana@gmail.com

PhD, University of Ioannina, Greece

**Charikleia Theodoraki**, E-mail: xarikleia85@gmail.com

PhD, University of Ioannina, Greece

The Ioannina team constituted of Plakitsi, Kolokouri, Nanni, Kornelaki, Stamoulis, Theodoraki will discuss a set of collaborative projects connected with Cultural Historical Activity Theory (CHAT) in Science Education in formal and informal settings as well as series of relevant publications. We have established the @formal and informal researching group (@fise group) at the University of Ioannina and work on the development of a new methodological framework for Science Education: the connection of CHAT with Science Education and the transition to the 4th generation of CHAT, as it was developed from Vygotsky, Leontiev and Engeström. Within this frame, we have developed 5 collaborative projects which concern a web-based teaching program for electromagnetism in a CHAT approach, two ways to develop activities for the first grades using scientific narratives and cartoons-animations as well as programming in scratch. Furthermore, we try to model teacher's distance training on Science in a CHAT context and, in addition, to develop a new methodology to do science in museums of general interest such as an archaeological museum. The collaborative work as a whole, prepares the ground upon which a new field in Science education will allow us to capture the complexity of science teaching and learning in formal and informal settings. This is a way to cover the spectrum of ISCAR-STEAM Education, learning and training in formal and informal settings. STEAM Education is proposed as a basis in order to foster inquiring minds, transformative thought and logical reasoning within a multidimensional context.

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***S5.2 Intervention in the context of a controversial issues: engaging in collaborative work and co-design of activities for the science class***

**Sylvie Barma**, E-mail: [sylvie.barma@fse.ulaval.ca](mailto:sylvie.barma@fse.ulaval.ca)

Full Professor, Laval University, Quebec, Canada

**Rollandes Deslandes**, E-mail: [rollande.deslandes@uqtr.ca](mailto:rollande.deslandes@uqtr.ca)

Ph.D, Emeritus Professor, Université du Québec à Trois-Rivières

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Laval University, Quebec, Canada

Barma, Deslandes, Voyer, Dewailly, Cooper, Dubois, Turgeon-Fortin will discuss health and science education and the development of critical thinking skills among high school students in the social context of the legalization of marijuana in Canada. The exploratory research focuses on the Change Laboratory (Lab\_C) and its possible impact on the reported consumption of high school adolescents. The implementation of the firsts CL sessions will be presented in the broader light of a process that promotes the development and innovation of educational and social practices. We aim at describing how science teachers appropriate activities co-modeled with an intervention team and set them up in the classroom to develop critical thinking. The variety of stakeholders grouped during the CL and the voice given to adolescents, the horizontality of the planned collaboration and the diversity of actors involved are original aspects that characterize this exploratory research. Considered as 'experts', adolescents are involved in this exploratory research. It is important to recognize their knowledge and experiences in order to address their concerns and thereby promote health education and informed decision-making. The symposium is oriented towards one of the objectives set by UNESCO, which aims to strengthen the education sector's response to the use of psychoactive substances.

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***S5.3 Unplugged computing climbing activities through the lens of Activity Theory***

**Élise Houssin**, E-mail: elisehoussin@me.com

Laval University, Quebec, Canada

**Margarida Romero**, E-mail: margarida.romero@unice.fr

Universités de Nice Sophia Antipolis et Côte d'Azur, France

**Sylvie Barma**, E-mail: sylvie.barma@fse.ulaval.ca

Full Professor, Laval University, Quebec, Canada

Houssin, E., Romero, M., and Barma, S. address the challenge of introducing Computer Science (CS) within a socio-cultural approach and a diversity of supports, including CS unplugged activities. These activities aims to introduce non-specialists to concepts of CS through hands-on activities that don't require the use of technology. Their goal is to develop computational thinking (CT) as a transversal competency requiring an analytical approach to problem solving, designing systems, as well as a creative solution. Their study focuses on the way learners plan and regulate their actions both at the cognitive level (climbing code) and the motion level (climbing activity). Engeström's framework, stresses the importance of socio-cultural history (conceptual model tools and equipment mediating one's activity) and one's interactions with one's social environment mediated by the rules and division of labour. Climbing is a physical activity that will be studied in relation to its potential as an unplugged computing activity wherein the participant plans his strategies and actions toward the goal of climbing. Unplugged computing and climbing activities can be considered an activity system with the object of producing an effective plan or code for climbing a wall. In planning, the set of actions is articulated toward the goal of creating an efficient climbing code. We discuss the observations developed through an exploratory activity and the way participants had the potential to develop some computational thinking competency within an activity in which they take into account the physical and coding constraints to engage their creative thinking skills related to CT.

***S5.4 “Byzantine Studies” as an exemplar of integrating science, history, geography, and mathematics education***

**Thomas McCloughlin**, E-mail: tom.mccloughlin@dcu.ie

MemMBA, MRSB CBiol, FLS, Chartered Biologist & Assistant Professor in Biology & Education, Dublin City University, Ireland

McCloughlin proposes authentic learning of science, history and geography education and lay great emphasis on the role of evidence in forming knowledge, beliefs and values to move away from the 'tyranny of pure content' enshrined in the Irish cultural mindset. His work investigates the applicability of the constructivist approach to historical and geographical knowledge in addition to science and proposes that the three 'environmental' subjects – in the broadest sense – have much in common. 'Paraconceptions' (those conceptions that go beyond the formal subject matter taught in school) are integrated in the real world, however, schooling promotes fragmented and

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primitive conceptions which although mathemagenic may nonetheless be conceptually distant from the paraconceptions that may be planned as outcomes. This work concerns the on-going development of a unit of work for the upper primary school, which examines the scientific and technological situation in the Eastern Mediterranean in the Medieval Era. Issues of justice and equality are also explored in examining the use of military technology in history and whether wood technology is gender biased. Working models of mangonels (simple siege weapons much used in the Ancient and Medieval Eras) were produced with which to conduct simple science experiments. The historical and sociocultural aspects of the way that technology was generally considered primitive in the Medieval Era is challenged and gives an opportunity for student teachers to novel teaching methods.

**h. 10:00-11:30, Room B- 1<sup>st</sup> Floor- Conference Centre “Karolos Papoulias”**

**PAPER SESSION 3:**  
*Session in Greek*

**Chairs:**

Theodoros Thanos, University of Ioannina, Greece

Harilaos Zaragas, University of Ioannina, Greece

Gerasimos Kekkeris, Democritus University of Thrace, Greece

***P3.1 The use of ICTs in the minority schools of Rhodopi prefecture***

**Keratsou Georgiadou**, E-mail: kgeorgia@bscc.duth.gr

Teaching Laboratory Staff, PhD, Democritus University of Thrace, Greece

**Hussein S. Duhantzi**, E-mail: duhanci123@gmail.com

Teacher Minority School Mastanli

**Housein Ramadan**, E-mail: rhusein@hotmail.gr

ReligionTeacher

**Gerassimos Kekkeris**, E-mail: kekkeris@eled.duth.gr

Professor, Democritus University of Thrace, Greece

The functioning of minority schools in the region of Thrace is governed by the Treaty of Lausanne (1923) which among other things guarantees the rights of the minority regarding religion and cultural customs. After a study which took place using questionnaires there will be presented the views of teachers who work in minority primary schools and are involved with the use of ICT there. The results of the study show that neither principals nor teachers of primary schools have sufficient knowledge of the utilization and application of ICT in teaching practice. The lack of logistics infrastructure and facilities is highlighted by the factors which significantly influence the utilization of ICT at these schools. The lack of culture from parents involved in the running of the

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school and in the integration of ICT in the school process, even in finding funding for ICT equipment, constitutes an obstacle to the full use of ICT by minority students. The Muslim minority of Thrace has been involved since 1990 in a constant effort to integrate and survive as equal citizens. The economic crisis which Greek society has been experiencing in recent years is evident in the lack of technological infrastructure in minority schools. The crisis may not have discriminated in terms of cuts as these applied to all. It seems however, to be creating a vertical crisis within the crisis.

### ***P3.2 Crisis and reproduction strategies***

**Theodoros Thanos**, E-mail: thanteo@otenet.gr

Associate Professor of Sociology of Education, Department of Early Childhood, University of Ioannina, Greece

Economic crisis, aside from economic effects, has strong effects on the main sectors of social life such as social reproduction strategies. Educational system, not only as a main sector of social life but also, as one of the main social reproduction strategies has been influenced by crisis. Based on a case-study methodology, this study is focused on the impact of crisis on lower socioeconomic background pupils' and their family's school and social life. Using observation tools and semi-structured interviews, the study indicate that school and social life from lower socioeconomic background pupil and their families has strongly been affected by economic crisis. Especially, what they do to handle with crisis phenomena is to restore old social reproduction strategies such as student job.

### ***P3.3 Biomechanical Analysis of Clumsy Movement Expression Balance and Preschoolers' Fall***

**Harilaos Zaragas**, E-mail: hzaragas@cc.uoi.gr

Assistant Professor, Department of Early Childhood, University of Ioannina, Greece

A small proportion of normally developing children of early childhood is kinetically expressed in a clumsy way without showing neurological problems. These features of motor clumsiness, which are often recognizable by kindergarteners, are the difficulty of wearing their clothes but also the frequent fall on the ground with little injury many times to the knee joint. This paper studies the human movement and fall that takes place within the free time of the break in kindergarten. Specifically, a biomechanical analysis of the movement of a diagnosed and non-diagnosed preschooler with the same age and weight during their motor expression (free play) will be attempted. From the systematic observation and the biomechanical analysis to a system of straight-track axes it appears that children are tired during the game by producing mechanical work. The analysis showed that the center of body weight (C.G) does not move straight but curved. When calculating the preschooler's weight, it is noted that the produced work for the lifting of the C.G is enough without, of course, calculating losses and friction. As the child is moving speedodynamically with fast straddle at a relative speed, the work produced is much bigger - and compared to the non-motor clumsy child of his or her age - and the child

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manages this situation with difficulty trying to keep the C.G on a support base of his body. This demonstrates the importance of applying qualitative and quantitative kinetic activities and corresponding experiences to the achievement of this balance capacity, namely the maintenance of the C.G. (Center of Gravity) of its body within the support base.

***P3.4 The contribution of socio-cultural theory of Vygotsky in treating 4-5 years old toddlers learning problems: The use of play therapy as a clinical tool***

**Dimitrios Sarris**, E-mail: sarrisdem@gmail.com

Assistant Professor, Department of Early Childhood, University of Ioannina, Greece

**Harilaos Zaragas**, E-mail: hzaragas@cc.uoi.gr

Assistant Professor, Department of Early Childhood, University of Ioannina, Greece

**Ioannis Stergioulis**, E-mail: sterioan@yahoo.gr

PhD student, University of Ioannina, Greece

Vygotsky considers that the socio-cultural environment is of crucial importance to cognitive development while the latter follows the socialization, i.e. social structures and social relationships lead to the development of mental functions.

On Vygotsky's point of view, the language is a fundamental symbolic basis for symbolization while it preserves a mediating role in how a child generalizes its spiritual shapes. The area of learning mediation between the actual and the potential level, to which a pupil can reach with the help of a peer or an adult, is called the proximal-imminent development zone.

In a theatrical play, the puppet, as a tool, is, according to Winnicott, the intermediate space between the child's inner and outer reality. Thus, through the puppet play, the child discovers himself. The fairy-tale and playroom space is not just a Winnicott's illusion of space but, via interpretation of Vygotsky's thought, a child's proximal development zone, that is, a child is given the opportunity to experience the joy of acquiring the skills and competences that leads him / her to socialization.

In the present action study, we studied the case of 5 toddlers, 4-5 year old, with learning difficulties and arose the case that at the end of the 12 sessions, children would be able to develop an inner speech, as a component of the learning-symbolic function, by codifying both the meaningful ones and the signified cultural and emotional elements that are expressed in the fairy tale and are portrayed with the puppet and the body.

Based on our results, during the symbolic play with the fairy tale and the puppet, a progressive transition of children from the self-centered to the symbolic speech was evident- which is in line with our hypothesis- and that puppet and fairytale sessions are the intermediary space for mitigating the deficiency at both cognitive and psycho-emotional level.

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**h. 12:00-13:30, Room B- 1<sup>st</sup> Floor- Conference Centre “Karolos Papoulias”**

**PAPER SESSION 4:**

*The effects of economic crisis in a cultural historical context*

**Chairs:**

Manolis Dafermos, University of Crete, Greece

Alexandre A.J. Buysse, Université Laval, Quebec, Canada

Jennifer M. Pipitone, College of Mount Saint Vincent, New York, United States

***P4.1 Dialogue on a possible crisis in the study of reflexivity***

**Manolis Dafermos**, E-mail: mdafermo@uoc.gr

Associate Professor, University of Crete, Greece

**Alexandre A.J. Buysse**, E-mail: alexandre.buysse@fse.ulaval.ca

Laval University, Quebec, Canada

The concept of reflexivity is increasingly used in different ways and various contexts such as education, social theory, social work, psychology, epistemology, etc. It is important to think about reasons of the wide dissemination the concept of the reflexivity and clarify different ways of its use.

The purpose of this paper is to promote a dialogue on possible crisis in understanding of reflexivity connected with existence of various tensions, antinomies, dichotomies, divisions, etc. One of the dimensions of this crisis is connected with the existence of different ways of conceptualization of objective subjective dichotomy. On the one side, reflexivity may be understood in terms of objective self-awareness, the ability to examine ourselves from the perspective of the outside world, in other words, with the ability to reflect ourselves as an object. On the other side, reflexivity may be examined in terms of subjective self-awareness, connected with the ability of consciousness to focus on external objects from the perspective of a subject.

The paper proposes that it might be time to go beyond artificial dichotomies and divisions in the conceptualization of reflexivity and develop a global perspective on the different challenges embedded in understanding of the process of reflexivity. A dialogue between the participants of this presentation aims at bridging gaps and overcoming possible contradiction. We consider that these existing tensions, if undealt with, engender a crisis in the study of reflexivity by stopping any further development. On the other hand, a view in which contradictions are surpassed would be a definite advantage for further exploration of this field.

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***P4.2 Getting Global with It: The Trouble with Study Abroad in the U.S.***

**Jennifer M. Pipitone**, Email: [jennifer.pipitone@mountsaintvincent.edu](mailto:jennifer.pipitone@mountsaintvincent.edu)  
PhD, College of Mount Saint Vincent, New York, United States

An emergent body of research in study abroad has shifted its focus from understanding student learning outcomes to analyzing dominant discourses and problematic trends that reproduce hierarchies of power and colonialism, perpetuate views of an exotic cultural “other,” and turn “global citizenship” into a commodity. What it means to “study abroad” is further troubled by tensions between the local and global, or what Jakubiak & Mellom have called a “myopic focus on the global.” Much of these tensions are rooted in the ways in which “global” is, or is not, operationalized. Situated within sociocultural and sociospatial perspectives, and drawing upon place-based pedagogy, this longitudinal comparative case study with 19 students on short-term study abroad programs to Morocco and Bali responded to these problems by exploring how engagement with local host country contexts can be used as a tool to build a global perspective. Findings indicate engagement with place was fundamental to the production of experiential learning space, mediated through pedagogies that engaged students with local rhythms, meanings, and histories; social interactions; and cultural tools that engaged students in alternative ways of knowing and being in the world. Reflecting on these findings, this presentation offers five epistemological commitments and several pedagogical strategies to guide future program development, including decentering the Western perspective and rethinking the local-global binary. Instead of concluding that the “global” is a fatally flawed concept, this work considers how it can take on new meaning within a sociocultural, place-based framework.

***P4.3 Transforming Contradictory Situations, Shaping Collective Experiences, Creating Conditions for Development***

**Glykeria Fragkiadaki**, E-mail: [gfragkiadaki@upatras.gr](mailto:gfragkiadaki@upatras.gr)  
Department of Educational Science and Early Childhood Education, University of Patras, Greece

This cultural-historical study examines the ability of young children to shape their own collective science experiences and create possibilities and opportunities for their scientific development. Drawing upon Vygotsky’s conception of how the child’s social situation of development is created, the study focus on everyday contradictory situations in kindergarten and the way children experience these situations. Empirical data from an indicative case example are analyzed, interpreted and discussed to highlight how kindergarten children cope with their multiple spontaneous ideas and initial representations about a natural phenomenon, creating the conditions for the development of their scientific thinking. The analysis and interpretation of the qualitative data are based on the dialectical-interactive method. The findings of the study revealed that children can construct, deconstruct and reconstruct the collective science experiences they are participating in and transform a social situation to the social situation of their

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development. New insights into understanding young children's experience in science as a real life phenomenon emerge from the study.

***P4.4 "I don't want to give money to these people." Responsibility in positioning towards meat production***

**Fabienne Gfeller**, E-mail: [fabienne.gfeller@unine.ch](mailto:fabienne.gfeller@unine.ch)  
University of Neuchâtel, Switzerland

Food production and especially the sectors involving animals are undergoing important changes, face a large range of issues and are problematic in many regards. Different studies point the impact of meat production on climate change, deforestation and soil degradation, and the ethical dimensions of animal farming are also intensively debated. In this presentation, I analyse the way individuals navigate these complex issues and position themselves in this landscape of challenges, recommendations and debates. The study was conducted in Switzerland, where vegetarians are a clear minority, but ecological, ethical and health implications of meat production are debated. I argue that Benson's theorization of the self as a locative system is a useful approach to understand individual positioning processes. I focus in particular on people who changed their consumption of products of animal origin recently, and analyse the key role of their conception of responsibility in this positioning process. As responsibility is strongly interrelated with choice and power over the situation, I complete my theoretical approach with Clot's work on power to act. My study includes both narrative interviews and a qualitative experiment based on dialogical approaches that aims at provoking the participants positioning and therefore allows to study the micro genesis of these processes. The analysis focuses on movements of (de)construction of responsibility in the participants discourses, and leads me in particular to discuss the individual – collective articulation as a key aspect of the person's positioning.

***P4.5 10 Years of Economic Crisis (2008-2018): A Real Developmental Challenge for Children, Adolescents and Young People in Greece (A Critical Review)***

**Lambrini - Theodora Akalestou**, E-mail: [aka.lina@hotmail.com](mailto:aka.lina@hotmail.com)

Postgraduate Student, Department of Social Policy, Panteion University of Social and Political Sciences, Greece

**Manolis Dafermos**, E-mail: [mdafermo@uoc.gr](mailto:mdafermo@uoc.gr)

Associate Professor of Psychology, Department of Psychology, School of Social Sciences, University of Crete, Greece

Ten years have passed since the outbreak of the financial crisis in Greece. In 2010, following the unveiling of an unsustainable budget deficit for the country, the Greek government had to resort to a Support Mechanism (European Commission, European Central Bank and International Monetary Fund) and seek financial assistance, subject to the implementation of certain memorandum contracts and a series of austerity measures. This urgent need for a change in policy has led to tough reforms in the field of labour,

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social security, health and education, causing strong shocks to the lower social class, with the most vulnerable populations being hit hardest. To date, few studies have succeeded in demonstrating in a holistic way the link between the macro-level of political-economic decisions and their direct and indirect impact on the micro-level of mental health and the development of children, adolescents and young people. The main aim of this paper is (A) the critical review of the research data that emerged during the current decade (2008-2018) regarding the impact of the economic crisis on the health and quality of life of children and adolescents in Greece, and (B) the emergence of the most crucial epistemological concerns that arise in relation to the targeting and practical value of these findings at a global level. Does the prosperity of young people continue to be one of the main objectives and reasons for (co) existence among the members of the European Union? What is the role of modern social sciences and the humanities in relation to such kind of «crises»?

**h. 12:00-13:30, Room A- Lobby- Conference Centre “Karolos Papoulias”**

**PAPER SESSION 5:**  
*Crisis in psychology and social sciences*

**Chairs:**

Herculano Ricardo Campos, Universidade Federal do Rio Grande do Norte, Natal, Brazil

Manuel L. de la Mata Benítez, Universidad de Sevilla, Spain

Nikos A. Mylonas, Durham University, United Kingdom

***P5.1 The method in the historical-cultural research and the ontological-historical perspective***

**Herculano Ricardo Campos**, E-mail: herculanorcampos@gmail.com

Universidade Federal do Rio Grande do Norte, Brazil

**Marilda Gonçalves Dias Facci**, E-mail: marildafacci@gmail.com

Universidade Estadual de Maringá, Brazil

The development of the historical-cultural psychology in the study of the “nature of psyche and its determinations” is due to the introduction of the historical and dialectical materialist method by Vygotsky, but fundamentally to the understanding of the social nature of man. However, this context reveals the large distance detachment of most part of the researchers from that philosophical orientation, resulting in confusion between method and methodology. And the incipient appropriation of the ontological-historical perspective of the method, which both results in data analysis devoid of the necessary observance of the processes of genesis and historical dynamics of the studied phenomena, as well as in the Vygotsky’s association with authors and procedures that in no way are consistent with the method and the ontological perspective adopted by it. In this sense,

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research on the theses and dissertations produced in Brazil's graduate programs in Psychology, between 2010 and 2015, recorded in the databases of Coordination of Improvement of People with Higher Education and Dissertation and Thesis Digital Library as historical-cultural, socio-historical or historical-cultural/socio-historical theory, a total of 182 studies registered were identified as historical-cultural or socio-historical, of which 151 were referenced in Vygotsky and 126 they associated Vygotsky with historical and dialectical materialism. However, only four studies pointed to the ontological perspective in their theoretical discussion. It's demonstrate the need to rescue the ontology in the method in Historical-Cultural Psychology, in order to avoid the risk of losing the necessary articulation between the individual and the historical totality that constitutes it.

***P5.2 From crisis to transformation: Stanislavsky's pathway towards a dialectical understanding of human psychology***

**Nikos A. Mylonas**, E-mail: nikolaos.mylonas@durham.ac.uk

School of Modern Languages and Cultures, Durham University, United Kingdom

One of the most interesting ideas in Vygotsky's corpus is depicted in the bold statement found in an unpublished draft: "psychology must be developed in the concepts of drama, not in the concepts of processes". Taking this as a starting point, the present paper attempts to outline the potential that Konstantin Stanislavski's influential acting training principles have for a dialectical understanding of the psychological dimension of human life. Despite being associated with vitalist accounts of human subjectivity, it is suggested that, the concept of life should be re-examined as a philosophical category that can accurately conceptualize human development as an active, reciprocal, non-linear, both constructive and destructive interaction of human beings with their milieu. Then, drawing on Georges Canguilhem's formulation that the states of health and illness are to be decided by the ability of the individual to create their own norms in their relationship with the environment, it is claimed that Stanislavski's psychotechnique can fulfil its inventor's objective of theatre as an institution of cultural and moral education being a source of fruitful ideas regarding centuries-old debates in psychology (mind/body problem, creativity and the unconscious) and as well as the challenges of overcoming personal and social life-crises and achieving self-transformation using "unconscious creativeness through conscious technique". Apart from constituting a cornerstone to Stanislavski's primary goal to create on the stage "the life of the human soul" his psychotechnique can be fundamental in the understanding of the human soul itself.

***P5.3 Challenges of the self: identity reconstruction in situations of inequality***

**Laboratory of Human Activity**, E-mail: mluis@us.es

Universidad de Sevilla, Spain

The profound crisis in Europe in the last years has accentuated inequalities and the risk of social exclusion for many groups. These groups are faced with genuine identity

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challenges that threaten their health and wellbeing and the integrity of their selves, too. When faced with these challenges people (individually and collectively) display different strategies and resources that enable them to successfully cope with the challenges.

From a theoretical perspective, our project is based both on a cultural-historical conception of the self, and on the adoption of a theoretical and methodological multilevel (individual, interactive and sociocultural) approach. From this perspective, the aim of the project is to analyze the way in which people from groups in situations of inequality and risk of social exclusion face the identity challenges. The specific challenges are addressed are:

- Failure and dropout from the educational system.
- Migration, integration and citizenship.
- Identity and gender-based violence.
- Severe mental disorder, stigma and recovery.

The participants belong to two generations. The methodology is based on the integration of quantitative (questionnaires and scales) and qualitative (semi-structured interviews, focus-group) approaches and techniques.

We expect that the data will allow us to characterize the processes of self (re)construction in relation with all challenges, including obstacles, strategies and resources. Besides of the specificities, we are interested in the commonalities observed across challenges. This must enable us to develop a theoretical model of the processes of self-reconstruction in these settings, as well as to support future programs of psycho-social intervention.

#### ***P5.4 Obstacles and resources for identity reconstruction in Latin American migrant women in Andalusia. A narrative analysis***

**Manuel L. de la Mata Benítez**, E-mail: mluis@us.es

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**María Lojo Ballesta**, E-mail: mlojo@us.es

Departamento de Psicología Experimental, Universidad de Sevilla. Spain.

Spanish society has experienced profound demographic changes in the last decades. This changes are related with the arrival of an important number of people from different countries, including Latin America. These changes are transforming the country into a multicultural society. The integration of the newcomers and the transformation of the country into a multicultural society represent a major challenge for our society. The situation of economic and social crisis increase the difficulties for this integration, especially, for migrant women, who experience a double discrimination, as migrants and as women.

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From a theoretical perspective migration must be conceived as an identity reconstruction process, in which the continuity of self of the people involved becomes threatened.

Our study is aimed at inquiring into the processes of self-reconstruction of migrant women, paying special attention to the obstacles for integration (including social discourses of exclusion), on the one hand, and to the resources (both individual and collective) employed by these women to overcome the obstacles and reconstruct their identities in the new society.

For that purpose we depart from a socio-cultural approach to the self, characterized as distributed, narrative and dialogical. The methodology involves the use of qualitative techniques (semi-structured interview). The analysis of the autobiographical narratives of the participants includes two steps:

- 1) Identification of the dominant themes in the autobiographical narratives.
- 2) Analysis of the I-positions and voices involved in the narratives.

The results of the analysis of a selected number of cases will be presented at the conference.

***P5.5 Testing the hypothesis of “retrogenesis” via the comparison of the structure of Athena Test among typically developing young children and mentally healthy older adults: A preliminary study***

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**Eugenia Savvidou**, E-mail: eugenia.savvidou6@gmail.com

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**Evangelia Foutsitzi**, E-mail: efoutsitzi@gmail.com

Laboratory of Psychology Department of Early Childhood Education, University of Ioannina, Greece

**Harilaos Zaragas**, E-mail: hzaragas@cc.uoi.gr

Assistant Professor, Department of Early Childhood, University of Ioannina, Greece

**Despina Moraitou**, E-mail: demorait@psy.aut.gr

School of Psychology, Aristotle University of Thessaloniki, Greece

**Georgia Papantoniou**, Email: gpapanto@uoi.gr

Laboratory of Psychology, Department of Early Childhood Education, University of Ioannina, Greece

The aim of this study was the comparison of the general cognitive ability, among typically developing young children and mentally healthy older adults, by exploring possible differentiations in the structure of the Athena Test across the age sub-groups of the sample. The sample consisted of 42 kindergarten students, 56 elementary school students, 118 young-old adults and 27 old-old adults. The participants were administered a short

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version of AT including six of its 15 sub-tests. Confirmatory factor analysis (CFA), applied to the data of the total sample and the sub-group of the young-old adults, showed that the six measured variables of AT loaded on a single factor. For the sub-groups of the old-old adults and the elementary school students, a single-factor structure was verified with five of the variables loading on it. CFA applied to the data of the sub-group of kindergarten students failed to confirm any single-factor structure of AT variables. The results support the hypothesis of “retrogenesis” since they reflect a delay in the development of a fully organized set of cognitive abilities for the elementary school students and the beginning of the differentiation of the structure of this set of cognitive abilities for the old-old adults.

**h. 12:00-13:30, Meeting Room and Foyer-1<sup>st</sup> Floor- Conference Centre “Karolos Papoulias”**

**PAPER SESSION 6:**  
*Diversity Themes in Education*

**Chairs:**

Theodoros Mardiris, Head of Education for Sustainability, Prefecture of Western Macedonia, Greece

Lida Stergiou, University of Ioannina, Greece,

Ioannis Leonardos, University of Ioannina, Greece

***P6.1 Implementation of ICT in Educational Programmes for Biodiversity and Sustainability: An Educational Approach of the E.E.C. of Kastoria***

**Magdalene Grigoriou, Anastasia Atzemi, Anastasios Vasileiou, Konstantina Lioliou, Athanasios Evangelou**, E-mail: kpekast1@otenet.gr

Educators of the Environmental Education Center of Kastoria,

**Theodoros Mardiris**, E-mail: thmardiris@gmail.com

Coordinator of the Education for Sustainability, Regional Center of Educational Planning of Western Macedonia, Greece

With a wider focus on Education for Sustainability, the educational programme of the Environmental Education Center (E.E.C.) of Kastoria, titled “Biodiversity - The Laboratory of Life”, aims to highlight the concept and value of biodiversity, its threats and the corresponding sustainable management practices. The programme addresses primary and secondary school students and its main axis is formed by a series of experiential learning activities, supported by the use of digital technology.

In brief, during the initial stage of the programme, an interactive projector and properly selected presentation material help to motivate students' interest towards the theoretical concepts under study, while smart mobile devices (smartphones, tablets), among other equipment, support fieldwork activities. Using selected digital applications (apps) and

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geo-positioning technology (GPS), students follow a prescribed path along the shore of the Lake of Kastoria, draw information, identify different habitats and various forms of life, observe and interpret their interactions. Moreover, aiming at stimulating students' interest in less obvious living forms, hence attempting a more complete understanding of local biodiversity, the potential of virtual and augmented reality applications (VR/AR apps) is used for enabling the observation of microscopic plankton organisms, macroscopic organisms of water or soil, migratory bird populations with seasonal presence in the area etc. At the final stage of the programme, through their participation in feedback activities, students' groups are encouraged to express their impressions and share their "discoveries" presenting digital material, images and sounds that capture the most interesting parts of their fieldwork experience.

Without questioning the benefits arising for students through their direct contact with natural environment, the present paper focuses on practices that incorporate the utilization of digital tools, their design criteria and their pilot implementation in the context of the educational programme of the E.E.C. Kastoria on biodiversity and attempts to highlight their positive contribution to the intended learning outcomes.

***P6.2 Experimental field actions as life-learning experiences and a value-forming factor in day-to-day educational practice***

**Marianthi Nastou**, E-mail: [nastou.marianna@gmail.com](mailto:nastou.marianna@gmail.com)

Primary Teacher, M.Ed., Ministry of Education, Research and Religious Affairs, Ioannina, Greece

According to literature review, educational visits to nature during lessons, experiential organized field actions and the identity of the regions where these visits and actions take place play an important role in shaping environmentally responsible behavior. Participants in organized educational experiences or actions in nature tend to link their individual identity to the area where they had the experience and the development of environmentally responsible behavior. Experiences in nature can change people's perceptions of nature resulting in viewing themselves in relation to the surroundings.

This paper will address issues related to organized experiential educational experiences in nature in an attempt to find ways of applying teachers' experiential methods and good practices in the everyday educational reality that can lead to the formation of environmentally responsible behavior.

The paper will also explore the potential of our everyday world and our immediate environment to teach out of the narrow limits of the classroom giving yet another reason so that we will seek to open the school to society and the immediate or indirect environment ensuring learning within the community.

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***P6.3 The contribution of the University of Ioannina to refugee education***

**Lida Stergiou**, E-mail: stergioulida@gmail.com

Assistant Professor, Department of Early Childhood, University of Ioannina, Greece

Starting in 2015, Greece, as one of the main entry gates to Europe, received a substantial number of asylum seekers with main origins in Syria, Afghanistan, Iraq, Pakistan and Somalia, the majority of whom were moved to other European countries. Nevertheless, during the past three years, a relatively stable number of refugees has been living in Greece that--among other issues--was called upon to regulate the educational inclusion of this population. In this presentation I will focus on the actions through which the University of Ioannina (UI)--since the early stages of the arrival of refugees in Epirus to the present day--responded to the educational needs of this particular student population group. More precisely, I will refer to the provision of non-formal education through the UI Program of language teaching in cooperation with TdH during the period 2016-18; to the informal visits of unaccompanied minors at the University; to the involvement of the Department of Preschool Education (DPE) in a training program organized by the Institute of Educational Policy addressed to education executives (2017-18); to the implementation of an inter-university training program addressed to teachers (2018-19); and, finally, to the organization of DPE students' practicum in pre-school structures targeting refugees (DYEP) during the current academic year. Through this presentation, important factors hampering the refugee education project will be identified, as well as several ways a Higher Education Institution can contribute to this challenging endeavour.

***P6.4 Making sense of economic crisis and migration: Greek 'neomigrants' in Australia***

**Nikos Bozatzis**, E-mail: nikobo@cc.uoi.gr

Psychology Section, Department of Philosophy, Education and Psychology, University of Ioannina, Greece

In ethnography, transnationalism criticises socio-theoretical perspectives on migration that adopt a push / pull logic insofar such perspectives project an image of 'structural victims' onto migrants. Transnationalism emphasises, theoretically, migrational agency and, in terms of research, aims at mapping the experiential field of migrants whose lives are demarcated by transnational practices (e.g. economic, family, social, communicational, political). An important aspect of transnational theory is the critique of methodological nationalism: It is argued that a substantial part of social research tends to treat the nation-State as a container of societal experience ignoring the social practices that run through it. In this presentation a critique of transnationalism is unfolded using as stepping-stones the sociopsychological notions of banal nationalism and banal occidentalism as well as the discursive turn in social psychology. Through an analysis of interviews with Greek 'neomigrants' in Australia it is shown that in their discourse also an imagery involving 'structural victimisation' and 'agency' is mobilised in order to account for the migration experience. However, what is also shown is that the construction of 'structural victimisation' and 'agency' mobilises a national culture

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imagery which pertains both to what counts as modern Greek condition as well as to the subject positions from which such imagery is enunciated. It is argued, therefore, that the ideological assumptions of nationalism are mundanely reproduced not merely in the ways in which researchers conceptualize and operationalise methodologically their research but also in the ways in which contemporary transmigrants make sense of their migration experiences.

**h. 15:00-16:00, Room A- Lobby- Conference Centre “Karolos Papoulias”**

**KEYNOTE 3:**

*Crises in the course of lives, crises in societies: a sociocultural approach*

**Tania Zittoun**, Email: [tania.zittoun@unine.ch](mailto:tania.zittoun@unine.ch)  
Full Professor, University of Neuchâtel, Switzerland

**Chairs:**

Manolis Dafermos, University of Crete, Greece,  
Marilena Lekka, University of Ioannina, Greece  
Anna Batistatou, University of Ioannina, Greece

Lives are constantly changing, and so are societies. Yet some changes seem more disruptive than others, and we tend to call them “crises” – and these are especially strong when they imply a mismatch between changing lives and their evolving contexts. How to understand these phenomena? Sociocultural psychology of the lifecourse offers us a theoretical frame to study the mutual making of people’s courses of life, and their changing social and cultural environment. It has especially examined the role of ruptures and transitions in the course of life, and their role in human development; it has also provided conceptual means to examine the link between social and historical changes, and courses of life. At a theoretical level, it has brought to the fore semiotic, dialogical dynamics by which history and courses of life are related; at a methodological level, it has promoted case studies, whether individual or regional, to make these dynamics visible. In this lecture, I will thus examine a series of recent studies showing the relation between crises in life, and crises in the context.

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**h. 16:00-17:30, Room B – 1<sup>st</sup> Floor - Conference Centre “Karolos Papoulias”**

**SYMPOSIUM 6:**

***Social inequalities and higher education in time of crisis***

**Chair & Organizer:** Theodoros Thanos, University of Ioannina, Greece

**Discussant:** Eleni Sianou-Kyrgiou, University of Ioannina, Greece

In recent years, global economic crisis has caused significant effects on the social life of Greece. Under these conditions, along with other sectors, education imbalance and functional difficulties have been observed. For example, during the years before the economic crisis on 2009, the problem of successful transition from higher education to the labor market has been made visible. Moreover, despite the expansion of higher education, social inequalities have been increased further in the time of crisis.

The symposium is focused on higher education, the more dominated educational structure of social choice in Greece. Its aim is to stress the impact of economic crisis on social inequalities in Greek higher education. The included lectures examine topics such as choice of studies, student's experience, academic and social engagement, and expectations to the labor market on the basis of student's socioeconomic background.

***S6.1 Tackling with student's academic and everyday life in the time of crisis***

**Theodoros Thanos**, E-mail: thanteo@otenet.gr

Associate professor of Sociology of Education, Department of Early Childhood, University of Ioannina, Greece

In recent years, student's academic and social life, along with all social sectors, have been influenced by economic crisis. The article aims to examine the impact of crisis on students' academic and social life as well as the way they manage to handle with it during the crisis. The research data are based on twenty semi-structured interviews. The results indicate the different ways that economic crisis structures impact on the student's academic and social life on the basis of their socioeconomic background. Students from medium and higher socioeconomic background are more likely to succeed in “privileged” departments, don't usually have financial problems and they develop strong expectations for their future prospective. On the other hand, student from lower socioeconomic background make big efforts to avoid withdrawing and dropping out from studies, to manage with financial problems. They, instead, use their degree as a shield against unemployment.

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***S6.2 Crisis and social inequalities in the transition of graduates from university to the labor market***

**Eleni Sianou-Kyrgiou**, E-mail: [esianou@uoi.gr](mailto:esianou@uoi.gr)

Professor of Sociology of Education, Department of Philosophy, Education and Psychology, University of Ioannina, Greece

The paper examines a serious issue, which focuses on research and scientific debate internationally in recent decades, on social inequalities in the transition of graduates from the university to the labor market. It is based on the review of international and Greek bibliography and on the data of a qualitative research carried out in graduates of the University with the aim of exploring the first seven years' experience after obtaining the degree in connection with finding a work related to the subject their studies and their qualifications. The findings conclude that often graduates with low social backgrounds or ethnic backgrounds have serious problems in finding a job. They remain long-term unemployed, are employed in jobs that are unrelated and inferior to their qualifications, with low wages. These problems are due to the crisis and the increase in unemployment, the strong competition in the labor market of graduates. They raise social inequalities that are reproduced in complex ways and must be the subject of research and systematic study to find solutions.

***S6.3 Choice of studies in Greek higher education in the time of crisis***

**Olga Tzafea**, E-mail: [olgatzaf@gmail.com](mailto:olgatzaf@gmail.com)

PhD Sociology of Education, University of Ioannina, Greece

The current global crisis offers new perspectives in Higher Education, especially after widening participation, affecting it in various and effective ways. On the basis of these changes is the decision-making process. It is a complex process because is related to the upheavals that occur in the economic and social global scene due to the crisis. This study is focused on this topic describing the data emerging from a quantitative and qualitative research methodology. Based on a sample of first-year students, the aim is to examine the factors that impact on student's choices of studies under the influence of the crisis. The theory of cultural capital of P. Bourdieu's explains that the choice of studies depends, to a greater extent than in the past, on the new reproductive strategies of the educational system. The way students, especially those from lower socioeconomic background, opt for their studies is determined not only by their cultural capital, but also by the crisis. The data analysis show that the crisis contributes to sharpening social inequalities through the differentiation of choices of studies. It is necessary to include in the education policy agenda new crisis-management practices that will focus on developing more equal conditions in the choice of study.

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***S6.4 Gender dimension of free time and crisis***

**Andromachi Bouna**, E-mail: machoula@windowlive.com  
PhD Sociology of Education, University of Ioannina, Greece

Free time and the activities are an important field to look at how the choice of options is evolving due to the economic crisis. This paper focus on how the young people act and move to the city in their free time. The restrictions which imposed by the economic crisis are also being examined. The concept of gender, as socially constructed roles and behaviors of men and women, is an important tool to approach the issue. The sample of the survey consists of 200 students from Universities in Greece. Data were collected from interviews and questionnaires. The focus on women's free time activities concerns on their personal room, home, neighborhood and entertainment venues as well as volunteer activity, generally in activities that increase the aesthetics of social supply. Men, on the other hand, are engaged in activities that develop a sense of responsibility and social supply, their own personal interest, the elimination of daily pressure, self-promotion and their personal recognition.

**h. 16:00-17:30, Room A- Lobby- Conference Centre “Karolos Papoulias”**

**PAPER SESSION 7:**

***Education and teachers’ training in times of crisis***

**Chairs:**

Fernanda Coelho Liberali, Pontificia Universidade Católica de São Paulo, Brazil  
Adolfo Tanzi Neto, Universidade Federal do Rio de Janeiro, Brazil  
Efstratia Sofou, University of Ioannina, Greece

***P7.1 DIGIT ME-D /Brazil: Critical Collaborative Interventions in Schools (Resisting Expanding in Unsettled Times)***

**Fernanda Coelho Liberali**, E-mail: liberali@uol.com.br  
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**Adolfo Tanzi Neto**, E-mail: professor.tanzi@gmail.com  
Adjunct Professor, Universidade Federal do Rio de Janeiro, Brazil  
**Maria Cecilia Camargo Magalhães**, E-mail: cigamaga@gmail.com  
Pontificia Universidade Católica de São Paulo, Brazil

Brazil is experiencing a dismantling of achievements in social, political and educational areas, which increases fear, anxiety and despair, as well as violence in the urban landscape. Striving to resist and continue to expand, we find inspiration in Freire and act together to create the “viable unheard of”. In this conjuncture DIGIT ME-D /Brazil comes with the aim to investigate curriculum reform, carried out with public and private schools,

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to work with multiple knowledge from a critical-collaborative perspective. The project is conducted by a group of researchers, working with a group of educators and students in the discussion, elaboration, construction, implementation and reformulation of curricular proposals. The project, carried out in institutions of higher and basic education of São Paulo, Piauí and Rio de Janeiro, involves researchers, managers, teachers and students, learning how to become educators' educators. Grounded on a Critical Research of Collaboration the interventions proposed by this project seeks to promote ZPD spaces, where the participants, together, describe, analyze, evaluate, make proposals for practices, in a constant argument whose focus is on weaving possibilities of creating the new. Critical Collaborative interventions in our project is linked to the idea of conflict that occurs in the encounter of individuals, with possibilities of being, knowing and acting different. It is from this critical-collaborative meeting that multiple possibilities for the future become possible. The data is produced and collected through audio and video recordings and field notes of the activities of the project and copies of the materials produced by the participants. The multimodal material is described, analyzed and interpreted by means of a dialogical-enunciative perspective. The proposal seeks a joint study with a view to the construction of the viable unheard of, as proposed by Freire and to share this research results in a critical-collaborative way. The project intends to continue the search for an improvement in the quality of education, in relation to the changes in the internal relations of the school and in the relation of the school with the community and society in broad terms. The desire is to make possible the experience of multiple cultural territories by all, students, educators, community and researchers.

***P7.2 Cultural-historical activity theory applicability in teachers CPD distance learning courses***

**Ani Epitropova**, Email: ahs@abv.bg

PhD Assoc. Prof. Faculty of Pedagogy, University of Plovdiv "Paisii Hilendarski", Bulgaria

Cultural-historical activity theory (CHAT) is a practice-based approach that could provide a cordial framework for analyzing professional work practices, including teachers' continuous professional development (CPD). It enables teacher trainers to analyze and implement complex and innovative strategies and engage teachers in self-reflective approach to their work and professional development.

The purpose of this paper is to highlight the Cultural-historical activity theory as it applies to online learning environment. Important considerations are investigated as they apply specifically to online learning in a CPD teacher's training courses. Six distance learning CPD courses for STEM teachers are analyzed and appropriate arguments adduced. The main focus is on understanding how learning and professional development are embedded in social and cultural activities in joint action. Indicators as learning culture, social interaction, learner motivation, active participation in different forums and learners' attainments are considered in the discussion. A set of criteria serve as measures for successful CPD courses for teachers are propounded with arguments.

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***P7.3 A “preschool PISA” in times of crises: What is the rationality for and what might be the consequences of a large-scale testing on young children?***

**Efstratia Sofou**, E-mail: [efsofou@gmail.com](mailto:efsofou@gmail.com)

Lecturer of General Pedagogy, Department of Early Childhood Education, University of Ioannina, Greece

In 2012 the Organisation for Economic Cooperation and Development (OECD) established an international project of children’s early learning, the International Early Learning Study (IELS). The IELS involves the testing of children between the ages of 5 to 5.5 years old on four ‘early learning domains’ (early literacy and numeracy skills, self-regulation, and social and emotional skills). As it is stated the purpose of the IELS is to improve early childhood services by providing valid and comparable information on children’s early learning. It is also argued that IELS will help countries to improve later educational outcomes by providing information on the trajectory between early learning outcomes and those at age 15, as measured by PISA. The IELS study adopts a positivistic perspective and values objectivity, universality, predictability and what can be measured, a perspective that is inappropriate for the evaluation of complex systems such as early childhood education. That is the way it may force a universal framework on teaching and learning and a further narrowing and standardization of early childhood education. Considering the consequences of the IELS study might have on early childhood education the aim of the paper is to engage with a critical analysis of its rationality and its impact at international and local level examining the ethical, methodological and political questions may raise of adopting a “global web of measurement” of education outcomes in early childhood education.

***P7.4 Scientific Play in Kindergarten Play-Based Settings***

**Eirini-Lida Remountaki**, E-mail: [eirini.lida.remountaki@gmail.com](mailto:eirini.lida.remountaki@gmail.com)

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**Glykeria Fragkiadaki**, E-mail: [gfragkiadaki@upatras.gr](mailto:gfragkiadaki@upatras.gr)

Department of Educational Science and Early Childhood Education, University of Patras, Greece

In this study, we explore scientific play in kindergarten play-based settings, when children’s ideas about the dissolution of solids into liquid are considered. Drawing upon Fleer’s conception on “conceptual play” and “scientific worlds”, the study seeks to examine how kindergarten children conceptualize dissolution and how they develop their thinking about the phenomenon through scientific play. Research procedure was carried out in three stages. In each stage, the researcher along with the kindergarten teacher formed a different educative scenario that contextualized an activity related to dissolution. The scenarios were based on children’s play with a puppet. Qualitative data were collected in an urban-area kindergarten in Greece during semi-structured conversations between two children aged 5.5-6 years old, one of the researchers and the kindergarten

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teacher as the puppet animator. Findings revealed that constant movement from imagination to reality and backwards along with collectively scientific discovery at emotionally charged situations enabled the two children to develop their thinking about dissolution. Children managed to form reasoning by recalling experiences from their everyday domestic reality, to transit this reasoning to different situations as well as to develop a methodological ability of approaching the phenomenon since they could display a stable view on dissolution. New insights into understanding young children's experience in science as a real life phenomenon emerge from the study.

***P7.5 Promoting climate and energy literacy: A discourse focused study on the communicative repertoires of four primary teachers***

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**Katerina Plakitsi**, E-mail: kplakits@uoi.gr

Professor, University of Ioannina, Greece

Climate change is one of the biggest threats that humanity faces today. Students' understanding of the climate change process is a very important goal. Scientific observations and the results of climate models show that human activities are the main cause of the greatest continuous increase in global average surface temperature. The paper focuses on the various ways that four primary school teachers, participating in a program supported by the Municipality of Athens entitled "Schools open to climate protection and energy saving, 2017-2019", communicate and promote aspects of climate change and energy literacy through their discussions with students during the implementation of the program's activities. Climate literacy is about understanding that each person influences the climate and that the climate affects not only individuals but the society too. Energy literacy is part of the climate literacy. In this ongoing project the teachers face the challenge to work as researchers on their practices and eventually to reflect on them in order to highlight aspects of climate and energy literacy that they promote using their communication repertoires throughout the implemented activities. In this paper, using a sociocultural discourse-focused qualitative approach, we trace the efforts of the four

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teachers participating in the program, using appropriate discourse strategies to explicitly introduce climate change and energy literacy issues in four elementary classrooms. The ongoing discourse focused research with its participatory, explicit and reflective character indicates that it is very important to involve teachers in analyzing their own talk. This procedure results in the teachers' acquisition of valuable awareness on aspects of climate change and energy literacy in their teaching and also in the progressive use of more appropriate communication repertoires concerning aspects of this literacy.

**h. 16:00-17:30, Meeting Room and Foyer-1<sup>st</sup> Floor- Conference Centre “Karolos Papoulias”**

**WORKSHOP SESSION 3:**

*Maturing of freedom to act at will”: hidden places and fantasy games*

**Luisa Adamyan**, E-mail: [bahia@inbox.ru](mailto:bahia@inbox.ru)  
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**Alexey Obukhov**, E-mail: [a.obukhov@redu.ru](mailto:a.obukhov@redu.ru)  
Higher School of Education, Moscow, Russia

Development of self-dependence as well as a source of human creativity based on «maturing of freedom to act at will» (term of L.S. Vygotsky). Growing up, children can acquire greater opportunities for self-determined examination of new spaces surrounding them and learning about the environment by experiencing the territory and landscape around. The development of children's independence and the sight of the potential avoidance of direct control coming from adults, on the one hand, enables children to visit different places beyond parental control, on the other hand, it creates restrictions and limitations imposed on visiting locations that are considered dangerous by grown-ups. This situation poses an uprise of phenomenon of secret children's worlds. Hidden places are the space where actively promotes the development of their own cognitive initiative, creates new opportunities for playing, designing and other types of children's activity. For example, the dumps provide the opportunity to find the new items and for this novelty, the child is ready to go again and again. Different ways of using the found items develops children's imagination and contributes to the creation of children's fantasy games. Fantasy games arise in the community of children (7 to 12 years old), last up to several years. They are associated with the allocation of secret spaces hidden from adults. In secrecy from adults the children get a full-fledged opportunity for “maturing of freedom to act at will”. The secret spaces and games make it difficult to access to study this phenomenon. However, we manage to fix children's hidden places and fantasy games.

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**h. 18:00-19:30, Room B – 1<sup>st</sup> Floor - Conference Centre “Karolos Papoulias”**

**SYMPOSIUM 7:**

***Human Rights and Interpersonal Relationships***

**Chairs & Organizers:**

Artemis Giotsa, University of Ioannina, Greece

Vassilis Koutras, University of Ioannina, Greece

**Discussants:**

Katerina Plakitsi, University of Ioannina, Greece

Nikos Bozatzis, University of Ioannina, Greece

The current symposium focuses on the field of Human Rights and Interpersonal Relationships considering different human systems. More specifically, the first presentation refers to the basic notions of social psychology that can be combined with the systemic theory and be applied to the Interpersonal Acceptance Rejection Theory (IPARTheory), developed by Rohner and applied in many different systems such as family, school, interpersonal relationships. The objective of the second presentation is to offer an outline of the intercultural human rights education program entitled “I sweetly lull our Europe to bed” which was implemented under the innovative action Teachers4Europe (<http://www.teachers4europe.gr/>). The third paper examines the perceptions of primary school teachers regarding the behavior and psychological adjustment of their students, interpersonally and intrapersonally. The research focuses on the interaction between the perceived behavior of students by the teachers and their psychological adjustment. The objective of the fourth presentation is to examine the relationship between perceived parental rejection, the quality of students’ friendships and search for social support in social networking web-sites. The key feature of the theoretical framework derives from the Interpersonal Parental Acceptance - Rejection Theory, in accordance with which, the acceptance from parents and other attachment figures has an important role in the development of the individual. The current symposium connects the field of human rights to the promotion of the protection of human rights in different fields and contains different aspects of interpersonal relationships in the family and school system and also in the social context.

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***S7.1 Elementary school teachers' perceptions of their students' behavior and adjustment on an intrapersonal and interpersonal level***

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**Artemis Giotsa**, E-mail: agiotsa@uoi.gr

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**Theodoros Kyriazos**, E-mail: th.kyriazos@gmail.com

Panteion University of Social and Political Sciences, Athens, Greece

The impact that teachers have on the development of their students is indisputable. This impact is dependent along with other factors on the perceptions they construct concerning their students. It is also a fact that teachers' perceptions are directly related to the acceptance and rejection feelings that students seem to perceive, as well as their academic and social outcomes. Therefore, the study examines the perceptions of primary school teachers regarding the behavior and psychological adjustment of their students, interpersonally and intrapersonally. The research focuses on the interaction between the perceived behavior of students by the teachers and their psychological adjustment. The sample of the study consists of 60 teachers of 3rd and 4th grade of elementary school of general education during the school years 2016-2017 and 2017-2018. Participants were asked to evaluate the conduct and the adjustment of 2 at least up to 4 of their students of all the class size that were according to the teachers totally different the one from the other as regards to these domains. Teachers completed the Greek version of TESC and the Questionnaire for Interpersonal and Intrapersonal Adjustment. The sample of the students evaluated by their teachers is 120 and it is balanced concerning the gender (60 boys, 30 in the research group and 30 in the control group; the same with the girls). The results of the research study will be discussed in relation to the newest findings of IPARTheory and the relationship between the behavior and the psychological adjustment of students.

***S7.2 Social Psychology, Systemic Theory and Interpersonal Acceptance Rejection***

**Artemis Giotsa**, E-mail: agiotsa@uoi.gr

University of Ioannina, Greece

The aim of the present paper is to present the basic notions of social psychology that can be combined with the systemic theory and be applied to the Interpersonal Acceptance Rejection Theory. More specifically, the paper introduces the basic principles of Social Psychology that can be used in the clinical practice within the context of IPART Theory and especially in different systems such as family, school, interpersonal relationships.

The basic principle of the Systemic Theory is the holistic approach of different phenomena. Systems theory suggests that all systems and subsystems are interconnected and influence each other simultaneously. According to the systemic theory the individual is a part of different systems in the same time. In order to understand a behavior of an individual, the focus has to be on the systems, the subsystems, the interactions and the

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interdependence between the members. The whole is more than the sum of the parts. It is important to understand how each subsystem interconnects and influences each larger system, and vice versa. IPARTheory is a theory of interpersonal relationships that attempts to formulate a lifespan developmental perspective on issues surrounding parental and other forms of interpersonal acceptance-rejection and behavioral control.

Key Words: Systemic Theory, Interpersonal Relationships, IPARTheory, Family System, School System, Clinical Practice

### ***S7.3 Social networking websites and family relationships; Students' perceptions***

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The objective of the current study is to examine the relationship between perceived parental rejection, the quality of students' friendships and search for social support in social networking web-sites. The key feature of the theoretical framework derives from the Interpersonal Parental Acceptance - Rejection Theory, in accordance with which, the acceptance from parents and other attachment figures has an important role in the development of the individual. The sample comprised 200 Greek university students (54% males, 46% females) aged on average  $M= 24.34$  ( $SD= 4.82$ ), both undergraduate (53%) and postgraduate (47%). Respondents completed the following questionnaires. To measure the parental acceptance and rejection, the father and mother version of the PARQ Adult, Short form was used. The two versions contain 24 items each, addressing parental acceptance /rejection as perceived retrospectively by an adult respondent. To examine the friendship quality of an adult the Adult Friendship Questionnaire was used (AFQ). AFQ is a 27-item self-report measure. Additional demographics were used to evaluate friendship quality including gender, age, years in friendship etc. Additionally, to evaluate the need to seek web-based social support, the Attraction to Computer-Mediated Social Support scale was used containing 33 items. Correlation analysis suggested that perceived rejection by mother and father was correlated with friendship quality and the need to seek web-based social support. Gender differences in paternal and maternal rejection, friendship quality and web-based social support pursuing were also examined. In addition, we examined the effect of socioeconomic status and other demographic variables on the above relationships. Present study is thought to be important because to the best of our knowledge it is the first study that examines students' perceptions with regard to family relationships and social networking websites.

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***S7.4 Preschool Children's education on human rights***

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The objective of the present paper is to offer an outline of the intercultural human rights education program entitled "I sweetly lull our Europe to bed" which was implemented under the innovative action Teachers4Europe (<http://www.teachers4europe.gr/>), during the school year 2015-2016, with the participation of 22 students who attend the all-day 10th kindergarten in the Greek town of Preveza.

The Universal Declaration of Human Rights (UDHR) and the Convention on the Rights of the Child (CRC) state that promoting the principles of understanding, tolerance and friendship among nations, and preparing children toward a responsible life in the spirit of these principles, are at the forefront of education.

Children's education on human rights through the aforementioned program, aims at creating a human rights culture. Lullabies were a suitable means by which students could come into contact with the cultural heritage of certain European countries, within the framework of a universal education, so that they can initially become acquainted with and then understand both the differences and similarities of these cultures.

**h. 18:00-19:30, Room A- 1<sup>st</sup> Floor- Conference Centre "Karolos Papoulias"**

**PAPER SESSION 8:**

***Sustainable development at times of crisis***

**Chairs:**

Evangelia Ntzani, University of Ioannina, Greece  
Anna Spyrtou, University of Western Macedonia, Greece  
Penelope Papadopoulou, University of Western Macedonia, Greece

***P8.1 Effects of economic crisis on wintertime air quality in Ioannina, Greece***

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A number of activities, including wood burning, are responsible for the emission of suspended particulates which are related to respiratory, cardiovascular and stroke among others diseases. We examined the effect of Greek economic recession on air quality in the town of Ioannina-NW Greece. We used data for particulate matter of diameter  $\leq 10\mu\text{m}$  (PM10) recorded from an urban background monitoring station for the period 2010-2017 and also data about energy consumption derived from the Hellenic Statistical Authority (HSA). We evaluated air quality based on the European Air Quality Index (EAQI), a scale ranging from “Good” to “Very Poor”. Exceedances of the daily European Union-established permitted levels ( $50 \mu\text{m}/\text{m}^3$ ) were computed for the months January-February of each year. According to HSA, heating oil consumption, the most popular material for household heating, was reduced in the greater Ioannina area during recession, leading to enhanced wood burning in fireplaces and stoves. Consequently, PM10 concentrations were increased in winter periods of low heating oil consumption and increased biomass burning, as documented in our results. During the years of economic recession there was an obvious increase in the number of days with mean daily PM10 values exceeding the EU standards, with a peak in January 2014, where the permitted levels were exceeded half of the month and for as long as 7 days consecutively. Furthermore, the instances where air quality was characterized as “Poor”/“Very Poor” based on EAQI increased from 2011 onwards, possibly leading to an increase of adverse health effects on the residents of Ioannina.

***P8.2 Nanoliteracy in Sight: Training students for a “nano-world”***

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Nanotechnology means, literally, any technology conducted on the nanoscale having profound applications in the daily life. Furthermore, while nanotechnology products have already invaded the market (e.g. cell phones, fabrics), concerns are expressed due to the emerging economic, social and moral implications. The introduction of nanotechnology aspects in all levels of education is regarded as crucial for developing students’ literacy, in order to come up with nano-based issues related to their life. However, content knowledge is not sufficient for taking decisions. Critical thinking skills are needed in order to become nanoliterate citizens.

Taking into account the above considerations we have developed and implemented educational materials and interventions addressed to 5th grade primary students (n=55). Specifically, students were introduced the concepts: Size (macro, micro and nanoworld),

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Tools (optical and electron microscope), Size-dependent properties (lotus effect, hydrophobicity), Science-Technology-Society (superhydrophobic clothes) and Models (e.g. use, create and evaluate models). The learning environment was inquiry-based including tasks that fire up critical thinking. For example, students were encouraged to analyze data in order to approach lotus effect.

Using pre- post- tests we evaluated primary school students' ideas and knowledge concerning the meaning they attribute to term nanotechnology before and after the implementation of the interventions. Based on inductive analysis we created (a) thematic categories concerning students' ideas and knowledge and (b) levels of understanding, in respect to the intended learning outcomes.

### ***P8.3 A formative intervention on education for sustainable development***

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Education for Sustainable Development (ESD) is a complex and complicated matter with a difficult to interpret definition, leading to multiple readings. Furthermore, ESD includes many aspects, environmental, societal and economic, and approaches to environmental and developmental problems exhibit great variety. In addition, ESD is not only about knowledge, but to make students aware of the problems humankind is facing and encourage them to become active citizens. In this study we will present the results of a formative intervention to pre-service teachers at the Early Childhood Department of the University of Ioannina. The teaching intervention was about what ESD is and why it is so important. We used houses, which are a social construct and an economic entity, to study their environmental influence. For this purpose, we used the exert of Socrates from Xenophon's Memorabilia to introduce students to bioclimatic architecture. There, Socrates vividly describes ways to use the sun as the main heating source and natural ventilation as cooling mechanism. The teaching intervention served as the first phase of an expansive circle. The implementation of the new model took place during the internship of the pre-service teachers. The pre-service teachers reflected on the model in their written reports. Based on the written reports we present how pre-service teachers chose to apply the issue 'houses' during their internship. Most of the reports show that the students had assimilated the crucial elements of ESD delivering sufficient outcomes and some improvised and produced interesting modifications.

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***P8.4 Plant blindness in primary school curriculum: Redefining science education to establish environmental awareness and promote sustainability***

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Even though plants contribute essentially to human life, people don't seem to find them interesting, as they disvalue and ignore them during their everyday life. This phenomenon is called "Plant Blindness" and it refers to human's: i) inability to notice the plants in one's own environment, ii) inability to recognize their importance and iii) tendency to rank flora as inferior to fauna. Plants' lacking intense motion, behavioral and morphological similarities among humans and animals, as well as the reduced emphasis on plant life in educational systems worldwide are some explanations of this phenomenon. Aim of this research is to analyze Greek primary school curriculum according to the grounded theory principles in order to clarify whether they shape attitudes and add to knowledge regarding plant life. According to the results, plant life seems to be examined rather incompletely in Greek primary school, especially regarding references about the importance of plants for human welfare and life's evolution on earth. Our conclusions enhance the general concern about the reduced emphasis on plant life in the educational context. This finding can be considered as an impediment to environmental citizenship, because knowledge and appreciation of the natural world are prerequisites for taking action in the direction of sustainable development and of promoting a healthy relationship with nature. Thus, awareness of the plants that exist on Earth along with recognition of their vital role in the conservation of our ecosystems can be top priorities in every curriculum worldwide and determine a positive shift in education's evolution.

***P8.5 Birdwatching in the years of Crisis. Is it possible for visiting schools and tourists to observe most of the famed 14 Ciconiiformes species of the Amvrakikos Wetlands National Park in the wild, economically in a single day, without disturbing the pristine area?***

**Vasilis Wooseas**, E-mail: [wooseas@otenet.gr](mailto:wooseas@otenet.gr)

Head teacher, MSc, PhD student, University of Ioannina, Greece

For millennia, Herons, Storks and Ibises, the Ciconiiformes, were the true masters of Amvrakikos in western Greece, reigning the wetlands long before humans settled in the area. Even today Amvrakikos hosts thousands of breeding pairs of 14 different species of Ciconiiformes. These are large, vividly colored birds capable of capturing the attention of visitors of all ages. Amvrakikos is so important for their breeding, and they are of such importance to Amvrakikos, that the official emblem of the Amvrakikos Wetlands National Park Management Body is a Heron. In the years before the crisis, visitors used to spend three to four days in Amvrakikos, searching for rare birds. Is it possible for visitors, students and tourists alike, to observe in a single day most of the 14 Amvrakikos

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Ciconiiformes in the wild, without causing any disturbance of this pristine area? What paths and directions should they follow? We present detailed maps and instructions for a successful daily expedition on the Ciconiiformes of the Amvrakikos Wetlands National Park.



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h. 10:00-11:30, Room A – Lobby - Conference Centre “Karolos Papoulias”

## SYMPOSIUM 8:

*From Microgenesis to Sociogenesis: The value of case studies to understand the dynamics of social change*

**Chair & Organizer:** Martina Cabra, Université de Neuchâtel, Switzerland

**Discussant:** Tania Zittoun, Université de Neuchâtel, Switzerland

The value of case studies in psychology is largely disputed. This symposium aims to explore the possibilities afforded by psychological case study research for understanding social change. From the perspective of sociocultural psychology, we will consider three case studies that highlight the way in which socio-genetic movements relate to people's everyday lives and development. In the different cases, this relationship is addressed through a microgenetic approach: the fall of a political regime is considered through the lens of an art collective; the rise of feminist movement as experienced by a child; and increased mobility as negotiated in small villages. More specifically, we focus on the semiotic dynamics within these movements to explore sense-making processes because it allows us/the researchers to follow trajectories of meaning from society to the person and back. We argue that single case studies allow us to explore the often neglected sides of societal transformation –how it is experienced, propagated, and resisted by individuals –as well as theory building that addresses social change on multiple levels: from intrapersonal to the cultural and the interactive dynamics in between.

### *S8.1 “Hey my man”: gender differentiation in the making*

**Martina Cabra**, E-mail: [martina.cabra@unine.ch](mailto:martina.cabra@unine.ch)

University of Neuchâtel, Switzerland

Navigating a gendered world, which upholds contradictory discourses, constitutes a challenge for children in their everyday life. Tim is 4 years old and just started school. By adopting an ethnographic approach, I construct a single case study following changes in play dynamics and significant adults' guidance. This allows looking at what of social dynamics can be found in children's development. Particularly, play is a locus for the anchorage of the group's belief system and the margin of freedom the child negotiates. Accounting for contextual aspects is possible through the ethnographic approach: there is a general context, institutions the child goes through, groups he interacts with, family members. Yet, what allows looking at social discourse in individual development is the semiotic lens: social demands and significant others are considered through semiotic

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elements part of the child's world. I argue Tim constructs a field of impossibles resulting of the interplay of materialization of collective stereotypes, people's use of objects and the child's unique symbolic elaboration. The latter allows understanding the margin of freedom for negotiating demands and gender roles. For Tim, an attempt to move beyond a limited play circle, first leads him to imitation and later on, to finding a compromise which articulates something of the "patriarchal" social demands, personal interests and "feminist" parental commitments.

***S8.2 Between Microgenesis and Sociogenesis: A Case Study of a Political Art Collective***

**Hana Hawlina**, E-mail: hana.hawlina@unine.ch

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Sociogenesis, the complex and multifaceted processes of societal formation and transformation, is commonly studied on the cultural level of analysis, looking at seismic shifts in values, political regimes, and traditional practices. Alternatively, social change is studied at the level of individuals, how they cope with it, negotiate or resist it, or how they are themselves transformed by the changes in the often opaquely defined public sphere. The aim of this paper will be to address the explanatory gap between the individual and cultural levels of analysis by studying the interactions of microgenetic and sociogenetic processes on the case study of Slovenian political art collective, NSK (Neue Slowenische Kunst). NSK was founded in 1984, when Slovenia was part of Yugoslavia, and was active throughout the tumultuous period of the (first symbolic and then violent) dissolution of Yugoslavia and Slovenia's transition from a socialist to a capitalist system. Through the prism of how a group collaboratively imagined and used art to critique the state ideology and founded an imaginary new country, I will analyse the historical processes of the end of a nation and the formation of a new one, and the accompanying imaginative processes of creating new imaginaries to break apart hegemonic representations and envision viable alternatives to the present regime. The focus will be on the relational and dialogical aspects of the political imagination, exploring how new possibilities are imagined collaboratively and how they feed back into cultural transformation and inspire new forms of dissent and collective action.

***S8.3 Mobilities at the outskirts of Europe***

**Oliver Pedersen**, E-mail: oliver.pedersen@unine.ch

University of Neuchâtel, Switzerland

Descartes' ghost still impinges on researcher's understanding of what it means to conduct a case study and what knowledge it produces. Case studies tend to focus on the individual's psychological experience and development, and rarely extends beyond the experimental setting. Even when researchers look behind the matrix, their accounts of culture and institutions are often monological. After all, what can a study of a single individual or small group of people possibly say about social reality. By exploring what happens when increasing mobilities introduces different worldviews in small villages at

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the outskirts of Europe, we will argue that case studies can unravel processes of social change on multiple levels. When an other disrupts the individual's regular sense-making, he or she has to re-evaluate what is known of the world, internally and externally – a process that is guided, restricted and/or enabled by what cultural material, representations and imaginations available to them. With this example, we question binary view on case studies, being either focused on the individual or societal changes, and promote the dialectic perspective from sociocultural psychology. Looking at microgenetic negotiations of symbolic boundaries, observations, and villagers' reflections and aspirations allow us to track how the encounter transforms their view of themselves, others and the future, as well as how it reflects and informs sociogenetic developments. Case studies can potentially help us understand people in relation to others and the world, and thus capture the dynamic processes through which social change consolidates ontogenetically and sociogenetically.

**h. 10:00-11:30, Room B- 1<sup>st</sup> Floor- Conference Centre “Karolos Papoulias”**

**PAPER SESSION 9:**

***ICT tools for Inclusion in the context of the Agenda 2030***

**Chairs:**

Jenny Pange, University of Ioannina, Greece

Eugenia I. Toki, University of Ioannina, Greece

***P9.1 Eye-tracking and Autism Spectrum Disorder***

**Eugenia I. Toki**, E-mail: [toki@ioa.teiep.gr](mailto:toki@ioa.teiep.gr)

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**Christina Simou**, E-mail: [xristina.simou.xs@gmail.com](mailto:xristina.simou.xs@gmail.com)

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**Jenny Pange**, E-mail: [jennypage@yahoo.gr](mailto:jennypage@yahoo.gr)

Laboratory of New Approaches in Communication Disorders, Department of Speech & Language Therapy, University of Ioannina, Greece

Eye-tracking is a non-invasive technology that electronically locates where we look (point of gaze) and records the position of the eyes and the movements they make in relation to the environment. Eye-tracking can be important in various medical settings, i.e. healthcare, psychology, neuroscience, neuromarketing. Research using eye-tracking technology in individuals with Autism Spectrum Disorder (ASD) reports on perceptual, cognitive and social emotional development issues. The aim of this study is to present a literature review of the current research findings on the use of Eye-tracking technology by young children in the ASD. The findings of this study highlight the importance of eye-tracking reporting that children with ASD have difficulties to interpreter gaze cues. In

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detail, they (i) preferably stare into the mouth and not in the eyes of a person when talking, (ii) gaze in human or objects of their interest that are moving, (iii) process one social stimulus or emotion at a time (iv) in multiple stimuli presentation they may feel confused. Eye-tracking technology accommodates new innovative paths contributing to early clinical diagnosis especially at the current time of crisis.

***P9.2 Does a blended learning environment suit practice training for physics students in a Greek university setting?***

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Blended learning refers to the integration of teaching practices using both online educational materials together with traditional face to face classroom methods. Many professors in higher education choose to uptake blended learning practices in order improve the students' learning experience and support them when issues of prior knowledge differences due to the different educational background and different educational priorities occur. The aim of this study was to explore undergraduate physics students' experiences when supported via a blended learning environment (BLE) to study analog electronics. Moreover, the focus was to examine BLE advantageous as preparing bridge courses to cover prior required knowledge in electric circuits and electromagnetism. Moodle was used as a learning management platform to publish the educational material. A questionnaire was used to gather 50 undergraduate students' experiences aged  $22,1 \pm 1,3$  years old. The results of the study revealed the positive learning outcomes when tradition face to face lecturing is enhanced with educational activities and materials through learning management systems and simulation environments. Additional statistical information provided by Moodle revealed the time students allocated on online activities. These outcomes are important offering educational alternatives especially in times of financial crisis.

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***P9.3 Teachers' Vocal Hygiene awareness via online voice self-evaluation***

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Teachers are using their voice professionally. It is important for them to be aware on issues concerning vocal hygiene and voice disorders. According to current research there is a lack of awareness on vocal hygiene that may later cause voice disorders. In speech and language therapy widely accepted techniques used to evaluate voice disorders include self-evaluation questionnaires together with non-invasive procedures such as acoustic analysis using specialized computer hardware/software. The aim of this study was to examine teachers' vocal hygiene awareness during a procedure of voice evaluation using online questionnaires. A sample of self-selected Greek high school teachers (N=40, male:20, female:20) in the prefecture of Ioannina, exhibiting no communication deficiencies, participated. For the purposes of this study a pre online voice self-evaluation questionnaire was completed, the online vocal assessment procedure took place and afterwards the post online questionnaire followed. Data from all participants was analyzed with SPSS (v.21), pre and post vocal hygiene awareness were estimated using Wilcoxon Signed-Rank non-parametric test and gender differences were estimated using Mann-Whitney non-parametric test. This study reported in detail on vocal hygiene awareness findings and statistical difference according pre and post awareness and gender. Concluding, positive preliminary measurements on vocal awareness in high school teachers were presented, contributing towards learning vocal hygiene aspects in a cost-effective, online manner in favor of general healthcare especially at times of crisis.

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***P9.4 Computer vs paper based pragmatics communication perception: A preliminary study***

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Pragmatics entails the proper use of language for communication in any context, including the linguistic adjustments (context, expression mode, body language, appropriateness) needed to accomplish the communication goal. Pragmatics communication deficiencies may lead to social dysfunction, unemployment and problems in family relationships. Computer or paper based techniques can be used in the evaluation of pragmatics communication perception. Literature review quotes a rapid popularity of computer-based techniques. The aim of this study is to examine whether pragmatics perception using computer-based evaluation is equivalent to its paper-based form.

The gamified evaluation on pragmatics perception in Greek was applied (i) in its paper-based form, and (ii) in its computer-based form with one-month time gap. The sample of the study was consisted of 40 (male:20; female:20) self-selected university students with non-communicative deficits. Data from all participants was analyzed with SPSS (v.21). Participants' response time and number of correct responses for both procedures were compared using Mann-Whitney non-parametric test.

The results of the study are presented in a detailed report on variables measuring the correct responses and the response time (mean and standard deviation) for the paper-based and the computer-based form of the procedure according to gender. Comparing these two forms, statistical significant differences were noted especially regarding the response time.

After applying the two forms of evaluating pragmatics perception, it was indicated that the computer-based form has a priority over the paper-based one. This study contributes towards cost effective innovative computer-based tools in education and healthcare at times of crisis.

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***P9.5 Computer-assisted voice measurements in Greek preschool children: Preliminary results***

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In order to perform voice evaluation in speech pathology a well-accepted method is computer-based acoustic analysis, offering non-invasive measurements towards the detection of pediatric voice disorders. The aim of this study is to report measurements of normal vocal parameters in preschool children.

The self-selected sample consisted of Greek native speaking children (N=40, male:20,female:20), aged 4:0-6:6 years old with no communication deficiencies and participated after parental/child consent. Vocal samples of sustained phonation /a/ were obtained and computer-assisted acoustic analysis using multi-dimensional voice program software was conducted. Data from all participants was analyzed.

The results of the study revealed no significant statistical differences found on vocal measurements between boys and girls. This study reported measurements on voice characteristics in preschool children contributing in a cost effective non-invasive computer-assistive manner beneficially for healthcare at times of crisis.

***P9.6 Blockchain contribution on future crisis' prevention: A case study***

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The recent global financial crisis revealed a vast underlying contextual disruption. Undoubtedly trusted, up to that time, authorities and methodologies are strongly questioned. The need for reinventing a powerful universal mechanism is demanding. Could we consider that transparency, objectivity and trust are, once again, the highly treasured societal attributes nowadays?

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The establishment of a new, universally trusted tool, under all perceivable contexts, (financial, social, transactional etc.), seems to be a raising societal quest. Toward this, a universal consensus mechanism, which may robustly complement, even substitute, legacy third-party trusted authorities sounds, at least, promising. The Blockchain concept vastly expands beyond finance, and has demonstrated groundbreaking applicability in facilitating trusted financial transactions without the need of a third trusted party, even though, the Blockchain concept became highly popular by fostering the advent of the cryptographic currencies. Blockchain is a transparent, public series of records mechanism, the sequence and the content of which is undisputable; to overlook its consequence in the educational sector is extremely hard. It certifies that the entire network collectively agrees on both the content and the sequence of the included records. By incorporating “smart contracts” like open source, computer executable programs, the ledger acquires active characteristics, such as undoubtable, a-priori defined behavior. Blockchain introduces a novel perception of trust, proclaiming “trust in the methodology” rather than “trust in the label”. The aim of this study is to investigate whether Blockchain is an effective step towards an effective prevention of future crises and what the necessary educational and societal skills for such application are.

According to the results of our study, which is in progress, we found that in a self-selected group of Greek students, most undergraduate and postgraduate students (87%), had never used this term or never discussed about it during their undergraduate or postgraduate studies. An educational arrangement has to be organized straight away, in order all our students to be informed on this matter.

**h. 12:00-13:30, Room A – Lobby - Conference Centre “Karolos Papoulias”**

**SYMPOSIUM 9:**  
***Science with Background***

**Chair & Organizer:** Fanny Seroglou, Aristotle University of Thessaloniki, Greece

**Discussant:** Dimitris Koliopoulos, University of Patras, Greece

The symposium attempts to re-locate and re-contextualize science teaching in its scientific, cultural and ethical background, as well as to bring forward the environment in which scientific theories are developed and organized, the interrelations of science and society and the values and attitudes encouraged and nourished by the dissemination of scientific knowledge. The symposium presents bridges between science and society, starts a dialogue on the challenges science education currently faces and points out proposals on how to design, apply and evaluate contemporary creative and multimodal learning environments. The more pieces of the puzzle of the overall image of science we manage to put together, the more pathways towards learning we travel, the more we continue thinking out of the box looking for teaching transformations of the science

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interpretations and science narratives, then we create more and more chances to invite more people towards learning and appreciating science as part of our global cultural.

### ***S9.1 Recontextualizing science for massive open online learning***

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This paper seeks to present the design and the development of an educational and also entertaining massive open online course (MOOC) to recontextualize science and the nature of science in its socio-cultural background. The developed MOOC is named "atlas mool - enjoy science", lasts 12 weeks and mainly contains multimodal educational and informative material that provides a collaborative and interactive environment for participants. The backbone of the developed MOOC is a series of short films for science education that seek to portray and present abstract concepts and theories of nature of science in a creative and original way. Aspects of nature of science emerge by re-shaping the image of science in the social, political, economic and cultural background presented in the short films, taking the participants away from the usually unpleasant, harsh and rigid image of science reflected to the public through education and media. The developed MOOC aims to:

- a) Provide a meeting point between citizens, students, pre- and in-service teachers and researchers in science teaching for collaboration and learning.
- b) Transform science learning into open, friendly and interactive communication.
- c) Produce educational material about science concepts and phenomena with a socio-cultural perspective.
- d) Recontextualize the science content.

The content, the structure and the function of the developed MOOC are analyzed during a six months university course for pre-service teachers. Methodological tools for analyzing speech, image, sound, multimodality and web diffusion focus on short films science content, participants' discussions, interactions and group work, questionnaire data and web traffic, demographics, analysis and analytics.

### ***S9.2 Science communication on the internet***

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Techno-science (science and technology) creates and transforms the social structures in a revolutionary and constant way. Rapid and unexpected changes occur on the way people communicate and manage their work environment, their arts and culture. Worldwide Web became a multidimensional instrument with unlimited possibilities and dynamics that are

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expanding and evolving continuously, developing new innovative interdisciplinary applications.

Worldwide web capability for science communication expands rapidly incorporating new multimedia artifacts and new multi-collective communication ways. Repositories of files, media and ideas can be the starting point leading to an interactive collaborative and disseminating environment of science diffusion. Science can be present here and now, from interactive experimental science laboratories to microcosm - macrocosm representations, or from reality representations to representations for reality, open, tangible and understandable to society.

Science teaching on the worldwide web becomes integrated with new emerging digital technologies and bilateral web-based learning environments. This "brave new world" with contemporary parallel cutting-edge environments and state-of-the-art virtual reality that is created, changes the constants and roles of all participants browsing on it. At the same time, a quest has started for new ways of visualizing science in order to present what happens inside the world of science to society in a palpable and comprehensible context. Communicating the overall picture of science to the public is a challenge for science education and digital design researchers.

Science education enhanced with web-based research and techno-scientific developments is lay ahead of the most important role in the demanding and changing modern environment, leading to a smooth transition from post-industrial society to the information society based on mutual understanding and respect.

### ***S9.3 Social media for science learning: A proposal***

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PhD student, ATLAS Research Group, Aristotle University of Thessaloniki, Greece

A big part of children's everyday life includes internet and social media, in combination with mobile technologies. Education interacts with the members of a society promptly, so it could not stay uninvolved in such a significant revolution. All the above facts lead to the necessity of the creation of new learning types, the provision of the necessary tools and instructional guides that are required to support these new learning practices. Designing new learning environments in conjunction with Information and Communication Technologies (ICT) throughout the curriculum, is a first attempt about this. While learning in these environments children have an active role in the process of acquiring knowledge, whereas teachers are architects, organizers and leaders of the educational process. The above technologies allow not only to search for information but, moreover, to create and share content. That is why students should not be considered as passive consumers of information but as active co-authors of content. The publication and exhibition of children's work as a subject of discussion and critique, cultivates a culture of knowledge construction and contributes to an in-depth understanding of content. At the same time, the publication of children's work on the internet is a way of bridging the everyday life of children and science and thus a way of rebalancing natural sciences as a science, as a subject of teaching and as a public image to the general public.

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***S9.4 Let's "feel" science!***

**Kostas Vourlias**, Email: [kvourlias@yahoo.gr](mailto:kvourlias@yahoo.gr)

ATLAS Research Group, Aristotle University of Thessaloniki, Greece

The relationship between science and sports has been well established in scientific books, magazines and web sites. Teaching science through sports, especially when course takes place out of classroom, where students performing physical activities, could be an effective way to challenge and motivate them. Using this method, we can interpret students' daily life, make them be actively engaged in the learning process, and encourage cognitive, meta-cognitive, and emotional skills and attitudes. In this paper activities are proposed that take place in the school courtyard, at an amusement park, an ice rink and an aqua park. In this context, pupils are encouraged to use their bodies, as an experimental tool in order to "feel" science. Results show that the developed activities introduce pupils to the nature of science and modify their perceived image about science helping them approach science in a qualitative, creative, comprehensible, practical, effective and pleasant way. Results, conclusions, feedback from the students and the way physics and sports may be combined in science teaching are also presented.

***S9.5 A social crisis in education: Gender issues in science and technology education***

**Natalia Panatsa**, E-mail: [nataliapan@yahoo.gr](mailto:nataliapan@yahoo.gr)

ATLAS Research Group, Aristotle University of Thessaloniki, Greece

The current social crisis has not left unaffected the field of education. Modern pedagogy faces as a challenge gender, science and technology osmosis, while formally well established traditional approaches still turn their eyes away for gender issues in science and technology education and miss to recognize the dimension of gender on discussing, elaborating and understanding science. School often stands as an obstacle in front of girls making even more difficult the attempts of young women to study science and technology and work in those fields. From this starting point educators see the need for reforming and reshaping science and technology learning. Feminist pedagogy offers many proposals for bridging the gender gap, from minor adjustments in teaching strategies to radical changed in the way our society approached learning. In this paper, a series of proposals are presented concerning curricula, text-books, evaluation, teachers' practices and ideas, the role of the family and the use of a non-sexist language. The application of those proposals in science and technology education could set off fundamental changes in all levels of education.

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***S9.6 Digital narratives about women scientists for pre-school education***

**Areti Botaiti**, E-mail: arbotaiti@sch.gr

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**Despina Kouklidou**, E-mail: dkouklidou@gmail.com

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**Fanny Seroglou**, E-mail: seroglou@eled.auth.gr

Associate Professor, Aristotle University of Thessaloniki, Greece

In this paper, the implementation of a teaching intervention as an action research focused on gender-in-science is presented. The research aims to reveal the work and life of the hidden figure of a woman and study how digital narratives create a friendly environment in pre-school science teaching. Research focuses on the use of digital narratives in pre-school education, the aspects of the nature of science triggered as children watch a slowmotion movie about a woman scientist and discuss about the conditions of life, work and contribution of the scientist as well as the relation between two “worlds”, the world of the woman scientist and the “world” of the children. The implementation is carried out in three phases, during which a variety of creative activities are being developed. In the first phase, the class processes pedagogically a digital narrative. In the second phase, an original story-parable is presented, used as a “bridge” to re-contextualize another science phenomenon and to support children’s understanding. In the third phase, the teacher refers to the woman scientist who has worked upon the specific phenomenon and supports young children to create their own digital narrative. The implementation takes place in an urban kindergarten in the western suburbs of Thessaloniki. Data have been recorded and selected recorded data have been analyzed using the GNOSIS research model focusing on three dimensions of teaching and learning science (cognitive, meta-cognitive and emotional) and seven aspects of nature of science. In this paper, the first results of data analysis are presented.

***S9.7 Moral education in the techno-scientific era: Teacher's tools for science teaching***

**Stella Chatzikou**, E-mail: chatzikou.s@gmail.com

PhD Candidate, School of Primary Education, Aristotle University of Thessaloniki, Greece

Science and technology teaching often refers to abstract concepts and complex natural phenomena, which, beyond the basic epistemic (cognitive) values they contain, carry equally important socio-ethical values. Their significance becomes particularly evident today due to the impetuous and often uncontrolled development of techno-science and the intractable problems arising in a socio-ethical and ecological context. The key question in this paper is how teachers can support students to form models of moral thinking through science teaching. This question becomes crucial in the constantly changing world we live in, where techno-science dominates not only in all areas of everyday life, but also in education, affecting the perception of natural phenomena, science and the very significance of learning itself. The aim here is to show that there

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must be an emphasis in teaching, regarding the moral relationship between the scientific approach of natural phenomena and their relation to the society and environment. This paper explores various types of tools a teacher can use to give students a more holistic perception of knowledge and a deeper understanding of nature and the world as a whole, and to inspire students with moral values such as ecological respect and responsibility. The challenge for today's teachers is to shape conscious future citizens by properly educating students, so that they have the ability to think critically about causes and consequences, limits and responsibilities, as well as about their position towards humans, technological science and nature.

**h. 12:00-13:30, Room B – 1<sup>st</sup> Floor - Conference Centre “Karolos Papoulias”**

**SYMPOSIUM 10:**

*The lost innocence of aesthetics. Crisis or conscious choice?*

**Chair & Organizer:**

Nikoletta Tsitsanoudis – Mallidis, University of Ioannina, Greece

**Discussants:**

Konstantinos Petsios, University of Ioannina, Greece

Giannis Mamais, University of Ioannina, Greece

The subject of the symposium is the answer to the critical and always topical question whether there are beautiful books today. To highlight the answers, exemplary aspects of the traditional typography and fundamental features that constitute the timeless charm of publishing production in Greece, are presented. In particular, the concept of harmony as a dominant parameter in the painful process of mediating between the creator and the reader is analyzed. At the same time, aspects of an industrialized production, which can often suffer aesthetically, are removed, without necessarily being stigmatized, by removing the innocence and the momentum it deserves from its artistic beauty. The consequence is the perpetuation and cultivation of a number of aesthetic faults, which may "educate" the diverse readership in a controversial "taste" at the expense of so-called typographical aesthetics. The symposium highlights as requested the daily demand for the notion of niceness, against the tyranny of speed or the dominance of profit.

***S10.1 The asceticism as an apparent aspect of the aesthetic discourse***

**Konstantinos Petsios**, E-mail: [kpetsios@uoi.gr](mailto:kpetsios@uoi.gr)

Professor at the Department of Philosophy, Education and Psychology, University of Ioannina, President of the Greek Philosophical Society

This paper attempts to highlight the way in which both the philosophical manuscripts and the ancient texts were compiled during the Ottoman domination. What seems to be at the

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center of attention of all those working either amateurishly or professionally as bookmakers of philosophical texts is the fact that, alongside the concern for the accurate content rendering, a special effort has been made to the aesthetic dimension of their form.

***S10.2 Looking for the future books***

**Thanasis Triaridis**, E-mail: [thanasis@triaridis.gr](mailto:thanasis@triaridis.gr)

Author, Director

Since the days of the middle-age micrographs to the iphone digital flat screen, the book holds itself a superior secret soul and reveals it only when the art of pagination and typography can unlock and change the perpetual enigma of the text.

***S10.3 Are there any beautiful books today?***

**Giannis Mamais**, E-mail: [giannism@dardanosnet.gr](mailto:giannism@dardanosnet.gr)

Art Director of Gutenberg

The constant and uninterrupted resistance to "what annoys the eye" in the authors' field work requires nowadays a reflection in terms such as beauty, aesthetic pleasure, artistically beautiful, classical form, easy to read and beautiful book. This reflection can lead to thoughts and findings opposed to forms and practices that are detrimental to the aesthetics book.

***S10.4 The book as a work of art***

**George Zachos**, E-mail: [gzachos@cc.uoi.gr](mailto:gzachos@cc.uoi.gr)

Director of the Library of the University of Ioannina, former General Director of the National Library of Greece.

Beyond its informational and educational nature and role, the book can, over time, also have a highly aesthetic value, being itself a work of art. This very rare feature can emotionally attract all those who choose to acquire a book under the main criterion of an exemplary elegant appearance that arouses the aesthetic delight during its reading.

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**h. 15:00-16:00, Room A – Lobby - Conference Centre “Karolos Papoulias”**

**SYMPOSIUM 11:**

***The strong mediation of Culture to overcome Crisis***

**Chairs & Discussants:**

Yannis Christakos, University of Ioannina, Greece

Theoharis Raptis, University of Ioannina, Greece

Maria Zoubouli, University of Ioannina, Greece

Xenofon Bitsikas University of Ioannina, Greece

***S11.1 Aspects of crisis in Antiquity: Talking to kids about past crises and ancient interventions at the Archaeological Museum of Ioannina***

**Ioulia Katsadima**, E-mail: ikatsadima@gmail.com

PhD, Archaeologist, Ephoreia of the Antiquities of Ioannina

Were there crises in antiquity? How do we get to know about them? How did people respond? Is it possible to recreate the multiple material, social and cultural realities that constitute a crisis, based on the study of the archaeological remains? What do the Museum’s exhibits reveal?

Over the last ten years, the Archaeological Museum of Ioannina, has dealt with similar issues more than once. In 2011 it participated in the celebration of the European Heritage Days, under the theme: Crisis, Continuities and Discontinuities. An educational program was planned for children 10-13 years old. It was focused on financial, social and political crises in antiquity based on the evidence provided by the material exhibited in Archaeological Museum of Ioannina, namely coin hoards and epigraphical testimonia e.g. the inscribed lead lamellae of Dodona.

Furthermore, the hosting of the exhibition of Myrtis, from November 2012 to February 2013, gave the opportunity to come literally “face to face” with the Past, thanks to the reconstructed model of an eleven-year-old Athenian girl, found along with thousands of anonymous victims of the plague that struck Athens in the first years of the Peloponnesian War, in the Athenian cemetery of Kerameikos. The exhibition was embraced by an educational program for children and people with disabilities as well as a round table that gave the opportunity to reevaluate the role of the museum in the modern socio-economic environment.

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***S11.2 The housing of Silversmithing Museum in the western bastion of Its Kale and the configuration of the permanent exhibition***

**Agni Drimtzia**, E-mail: [DrimtziaA@piraeusbank.gr](mailto:DrimtziaA@piraeusbank.gr)

Local Administrator, The Silversmithing Museum of Ioannina, Piraeus Bank Group Cultural Foundation

The Silversmithing Museum is located in the castle of Ioannina, and more specifically in the western bastion of the north-eastern acropolis (Its Kale). It occupies the bastion's two levels, as well as the adjacent building of the old cookhouses.

This untapped part of the Castle was restored by The Piraeus Bank Group Cultural Foundation (PIOP) in order to house the permanent exhibition of the Museum. It is an ideal collaboration between npublic and public sector, as it expands in areas that have been ceded by the Hellenic Ministry of Culture with a programm agreement, while the restoration was based on complete and approved studies and were carried out in close cooperation with Ioannina Antiquities Sevice.

It is a thematic museum, as it concerns the technology of silversmithing during the pre-industrial period, while simultaneously being a regional museum, as it focuses principally on the history of silversmithing in the region of Epirus. Temporally, the exhibition refers essentially to the post-Byzantine period, from the 15th century onwards, but without excluding references to the more distant past, given that the technology used to produce silverware often dates back to much older periods of time.

Its objective is to preserve our knowledge of Epirote silversmithing and to disseminate information about its technology to the wider public. Also, to tie in this technology to the social context of the period during which it was developed and flourished.

***S11.3 10 Sculptors Create Sculptures Using Recycable Materials***

**Theodoros Papagiannis**, E-mail: [mca.papagiannis@gmail.com](mailto:mca.papagiannis@gmail.com)

Sculptor, Emeritus Professor of Sculpture at the Athens School of Fine Arts (ASFA) and Founder of the Museum of Contemporary Art "Theodoros Papagiannis"

The "Theodoros Papagiannis" Museum of Contemporary Art hosts 20-day sculpture symposia –WORKSHOPS, every summer, including many artists from Greece as well as from abroad. We make sculptures, mainly using recyclable materials, which we collect from junk yards, places where we can find recyclable materials and more specifically, metal. As you will realize, while you are watching our video, we collect our raw material from junk yards and then use our imagination in order to create our works. These sculptures, which enrich our collection, are placed in public space or in the Sculpture Park in the Museum yard or even on the 5km way from the entrance of the village to the Castle and Monastery of Panagia Tsoukas. Each time, 10 artists create their sculptures in the courtyard of the Museum, using the materials of their preference and at the end, we see the final result. At the end of the symposium, all the works are exhibited in a defined space. The whole procedure is described in the video with English subtitles that you are going to watch and moreover, artists talk about their works. The works of the sculptors

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are of their own choice as it is the policy of the Museum to let the invited artists express themselves as they wish.



