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FOREWORD

Dear Colleagues,

We are delighted to welcome you to the International Conference on Education and New Developments 2016 - END 2016, taking place in Ljubljana, Slovenia, from 12 to 14 of June.

Education, in our contemporary world, is a right since we are born. Every experience has a formative effect on the constitution of the human being, in the way one thinks, feels and acts. One of the most important contributions resides in what and how we learn through the improvement of educational processes, both in formal and informal settings. Our International Conference seeks to provide some answers and explore the processes, actions, challenges and outcomes of learning, teaching and human development. Our goal is to offer a worldwide connection between teachers, students, researchers and lecturers, from a wide range of academic fields, interested in exploring and giving their contribution in educational issues. We take pride in having been able to connect and bring together academics, scholars, practitioners and others interested in a field that is fertile in new perspectives, ideas and knowledge. We counted on an extensive variety of contributors and presenters, which can supplement our view of the human essence and behavior, showing the impact of their different personal, academic and cultural experiences. This is, certainly, one of the reasons we have many nationalities and cultures represented, inspiring multi-disciplinary collaborative links, fomenting intellectual encounter and development.

END 2016 received 489 submissions, from 53 different countries, reviewed by a double-blind process. Submissions were prepared to take form of Oral Presentations, Posters, Virtual Presentations and Workshops. It was accepted for presentation in the conference, 133 submissions (27% acceptance rate). The conference also includes a keynote presentation from an internationally distinguished researcher, Professor Dr. Mojca Jurišević, Associate Professor of Educational Psychology, Faculty of Education, University of Ljubljana, Slovenia, to whom we express our most gratitude. Also, we give a special thanks to Professor Emerita Nina K. Buchanan, PhD, University of Hawaii, USA and Professor Emeritus Robert A. Fox, PhD, University of Hawaii, USA for the special talk entitled “The Search for New Educational Forms in the United States and its International Implications”.

This volume is composed by the abstracts of the International Conference on Education and New Developments (END 2016), organized by the World Institute for Advanced Research and Science (W.I.A.R.S.) and had the help of our respected co-sponsor and media partner that we reference in the dedicated page. This conference addressed different categories inside the Education area and papers are expected to fit broadly into one of the named themes and sub-themes. To develop the conference program we have chosen four main broad-ranging categories, which also covers different interest areas:

• In TEACHERS AND STUDENTS: Teachers and Staff training and education; Educational quality and standards; Curriculum and Pedagogy; Vocational education and Counseling; Ubiquitous and lifelong learning; Training programs and professional guidance; Teaching and learning relationship; Student affairs (learning, experiences and diversity); Extra-curricular activities; Assessment and measurements in Education.

• In PROJECTS AND TRENDS: Pedagogic innovations; Challenges and transformations in Education; Technology in teaching and learning; Distance Education and eLearning; Global and sustainable developments for Education; New learning and teaching models; Multicultural and (inter)cultural communications; Inclusive and Special Education; Rural and indigenous Education; Educational projects.

• In TEACHING AND LEARNING: Educational foundations; Research and development methodologies; Early childhood and Primary Education; Secondary Education; Higher Education; Science and technology Education; Literacy, languages and Linguistics (TESL/TEFL); Health Education; Religious Education; Sports Education.

• In ORGANIZATIONAL ISSUES: Educational policy and leadership; Human Resources development; Educational environment; Business, Administration, and Management in Education; Economics in Education; Institutional accreditations and rankings; International Education and Exchange programs; Equity, social justice and social change; Ethics and values; Organizational learning and change, Corporate Education.
The abstracts contain the results of the research and developments conducted by authors who focused on what they are passionate about: to promote growth in research methods intimately related to teaching, learning and applications in Education nowadays. It includes an extensive variety of contributors and presenters, who will extend our view in exploring and giving their contribution in educational issues, by sharing with us their different personal, academic and cultural experiences.

Authors will be invited to publish extended contributions for a book to be published by inScience Press.

We would like to express thanks to all the authors and participants, the members of the academic scientific committee, our co-sponsor and media partner and, of course, to our organizing and administration team for making and putting this conference together.

Hoping to continue the collaboration in the future,

Respectfully,

Mafalda Carmo
World Institute for Advanced Research and Science (WIARS), Portugal
Conference and Program Chair
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KEYNOTE LECTURE

CUTTING-EDGE RESEARCH ON MOTIVATION TO LEARN

Prof. Dr. Mojca Juriševič
 Associate Professor of Educational Psychology, Faculty of Education, University of Ljubljana (Slovenia)

Abstract

Scholars have long recognized the core role of motivation in supporting students’ learning, and numerous empirical studies have evidenced the effect of motivation on the teaching and learning process. Despite the importance of the construct, researchers still differ in their understanding of its nature and nurture, probably due to the adoption of diverse theoretical paradigms and methodological approaches, as well as to existing gaps between professional considerations, on the one hand, and the reality of everyday school life influenced by the broader sociocultural context, on the other.

For the purpose of this presentation, we define motivation within a general cognitive framework as a psychological process manifested by various motivational components and patterns that instigate and sustain goal-directed learning activities, and thus reciprocally relate to learning and performance. Keeping the research in mind, we will address some of the main principles that guide contemporary research and practice related to motivation, e.g., the interplay between intrinsic and extrinsic motivation, the balance between the underlying motivation goals, and the power of teachers’ formative feedback in cultivating the motivation to learn. In explaining the basic motivational dynamics, we will use selected case studies and findings from empirical research, specifically related to the motivational structure of high-achieving students.

Finally, central to the talk is an attempt to provide evidence-based reflection on current motivation-related dilemmas from the scientific perspective, and to examine the role of motivation in systematic empirical work, e.g., individual differences in motivation, development of mindsets, the role of praise and feedback, students’ lack of motivation, and assessment of motivation.

Brief Biography

Mojca Juriševič is Associate Professor of Educational Psychology at the University of Ljubljana, Faculty of Education. Her research interests span the fields of learning and teaching with studies focusing on topics such as motivation to learn, self-concept, creativity, gifted education, portfolio development, mentoring, and teacher professional development. She has been involved in many research projects and she has published books, chapters and papers in both national and international peer-reviewed periodicals. She is the Head of the Centre for Research and Promotion of Giftedness at the Faculty of Education University of Ljubljana. She is a member of different scientific and professional organizations on national and international level and she serves as the Chair of the division “Psychologists in Education” of the Slovenian Psychologists’ Association. She is also an affiliated member of the American Psychological Association.
SPECIAL TALK

THE SEARCH FOR NEW EDUCATIONAL FORMS IN THE UNITED STATES AND ITS INTERNATIONAL IMPLICATIONS

Nina K. Buchanan, PhD & Robert A. Fox, PhD
Professors Emeriti, University of Hawaii (USA)

Abstract

In the three decades since the publication of “A Nation at Risk” in the U.S., a national reassessment of the educational enterprise has taken place (National Commission on Excellence in Education, 1983). The issues of the effects of poverty, of cultural responsiveness and of racial equity have become a central part of the education discussion (U.S. DOE, 2004; Banks, 2005; U.S. DOE, 2013 and many, many more). Criticism of student performance, assessment of the causes of its not being better, or proposals for its improvement are rampant in both the popular press (Bidwell, 2013; Chappell, 2013; Ryan, 2013) and educational research (Institute for Education Sciences, 2008; Reardon, 2011). With rising doubts concerning the ability of traditional public school effectively to educate America’s children, many policy makers and educators cite school choice as one of the promising reform strategies to improve k-12 education.

In the Handbook of School Choice (in preparation) six forms of U.S. school choice are cited: vouchers, charter schools, virtual schools, home schools, private schools, and magnet schools. In this proposed Session, we describe each of these forms of school choice and the research evidence these forms have generated. In each case, we compare arguments made both by supporters and opponents and give examples from the U.S. experience. We also briefly describe international variations on each form of school choice.

Keywords: School choice, educational policy, comparative international education.

References


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**Brief Biography**

*Nina K. Buchanan* is Professor Emerita at the University of Hawaii Hilo. She began her professional journey on the Montana prairie as a teacher in a one-room schoolhouse where her 11 students taught her the value of psychology and development on learning. Since then her addiction to learning and teaching has led her from Montana to Indiana to California to earn her Ph.D. in Educational Psychology with emphasis in gifted education and cognitive psychology. In addition to teaching students in grades kindergarten through graduate school, Nina is a founder of the West Hawaii Explorations Academy Public Charter School, Hawaii’s first chartered high school that has been recognized as a Blue Ribbon School of Excellence and Intel-Scholastic School of Distinction for achievement in science education. Dr. Buchanan has published widely in gifted education, project-based learning and national and international school choice. She is known throughout the state of Hawaii for her service on the first independent charter school governing boards. At the national level, she is an emerita member of the American Educational Research Association (AERA), active for over 20 years as a founder of both the Research on Giftedness and Talent and the Charter School Research and Evaluation SIGs. She also serves on the advisory board for the Gifted Education Resource Institute in the School of Education of Purdue University. Throughout her career, she has been and active reviewer of proposals for AERA and US Department of Education grants such as the Charter School Program. She was a contributing editor of *Roeper Review* and is currently a senior editor of the Journal of School Choice. For the past three years Dr. Buchanan has served as Program Chair for the International School Choice & Reform Academic Conference.

*Robert A. Fox* is Professor Emeritus of Physics at the University of Hawaii Hilo. He retired after having served as Chair of the Department of Physics and Astronomy and Deputy Director of the Pacific International Space Center for Exploration Systems. During that portion of his career, he co-authored 39 papers and presentations on lunar sustainable habitats, atmospheric neutrinos, positron decay, and laser interactions. In addition to his work in physics, Dr. Fox has served as an educational leader and policy maker as an elected member of the Hawaii State Board of Education, responsible for 185,000 students in approximately 200 schools with an annual budget exceeding 2 billion dollars; an ex officio member of the Board of Directors of the National Education Association; Chair of the NEA Higher Education Caucus; Vice Chair of the American Association of University Professors’ Collective Bargaining Congress; and President of the University of Hawaii Professional Assembly. More recently Dr. Fox has taken active leadership roles in the American Education Research Association School Choice and Charter School Research & Evaluation Special Interest Groups (SIG). Under his leadership the SIGs have jointly formed the Charter Schools & School Choice SIG. He also has been instrumental in creating the International School Choice & Reform Academic Conference and served as Chair for the past three years. Dr. Fox is a Senior Editor of the *Journal of School Choice* and has been guest editor of the special issue on *School Choice and the Law* and co-Editor of two special sections on the 2013 and 2014 Conferences. His wide research interests include collective bargaining in charter schools, state charter school legal issues, and ethnocentric niche charter schools. His most recent book, co-edited with Nina K. Buchanan, is *Proud To Be Different: Ethnocentric Niche Charter Schools*, was published by Rowman and Littlefield in 2014. His work has appeared in *Barack Obama: The Aloha Zen President*, Michael Haas, ed., Praeger, 2011 and in *The Emancipatory Promise of Charter Schools*, Stulberg and Rofes, eds., SUNY Press, 2004. He was an educational book reviewer for the American Library Association. He is the author or co-author of 52 papers and presentations primarily dealing with various aspects of school choice.

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ENGAGING LEARNING ANALYTICS IN MOOCS: THE GOOD, THE BAD, AND THE UGLY

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Abstract
Learning Analytics is an emerging field in the vast areas of Educational Technology and Technology Enhanced Learning (TEL). It provides tools and techniques that offer researchers the ability to analyze, study, and benchmark institutions, learners and teachers as well as online learning environments such as MOOCs. Massive Open Online Courses (MOOCs) are considered to be a very active and an innovative form of bringing educational content to a broad community. Due to the reasons of being free and accessible to the public, MOOCs attracted a large number of heterogeneous learners who differ in education level, gender, and age. However, there are pressing demands to adjust the quality of the hosted courses, as well as controlling the high dropout ratio and the lack of interaction. With the help of Learning Analytics, it is possible to contain such issues. In this publication, we discuss the principles of engaging Learning Analytics in MOOCs learning environments and review its potential and capabilities (the good), constraints (the bad), and fallacy analytics (the ugly) based on our experience in last year’s.

Keywords: Learning Analytics, MOOCs, pedagogy, potential, dilemma.

USING TECHNOLOGY-ASSISTED LEARNING TO TRANSFORM EMPLOYEE DEVELOPMENT

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Abstract
The significance of e-learning and knowledge management in the workplace cannot be overstated. In today’s technology-driven working environments the accelerated pace of change is a constant, and organizations are pressed to rapidly train and retrain workers in new technologies, products, and services with increasingly limited timelines and resources. The constant and unrelenting need to manage the organizational knowledge base to keep it current and readily accessible to all stakeholders in the work environment is an additional factor driving the need for just-in-time training and retraining of the workforce at all levels.

Forward thinking employers have recognized e-learning as more productive from both the employers’ and the employees’ perspectives. They acknowledge that e-learning increases the possibilities for how, where, and when employees can engage in training. Some organizations have been slower to adapt to e-learning as a training option because of costs, technical limitations, and lack of understanding its fundamental advantages. These factors have become less inhibiting as costs of e-learning implementation have steadily decreased and the required technical expertise has been aided by newer, more user friendly e-learning formats and programs.

This paper addresses the significant impact that e-learning is having on workplace education by demonstrating how traditional classroom training is gradually being replaced by mediated instruction. It shows the advantages that e-learning has realized over traditional classroom education and how e-learning formats are becoming increasingly prevalent as the preferred method of continuing professional education in the workplace. Examples of successful e-learning courses will be highlighted providing a design model of how to construct effective e-learning for workforce education. Additionally, program evaluation data presented will further describe how the change from the traditional classroom model to a mediated delivery model has had a positive impact on employer and employee needs as it relates to training and workplace education.

Keywords: e-learning, distance education, mediated instruction, workplace education, training.
TEACHING OF ADVANCED COMPUTER GRAPHICS WITH THREE.JS

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Abstract
Computer graphics is one of the major modules in computer science. Its contents involve mathematical transformations, lighting, shading, texture mapping, modeling, rendering and visualization. While various programming languages, such as OpenGL and Java3D, can be adopted for implementation and demonstration, they are challenging for students to follow since they embed all the knowledge in a big package and involve many data structures and methods with varied parameters. This paper investigates how the latest open source software packages such as Three.js can help the delivery of the module in an easy to understand and follow way. Three.js encapsulates the rendering process, provides many basic functions for such tasks as lighting, shading, texture mapping, and simple object modeling and organization. It also possesses an extremely attractive advantage over the existing 3D programming languages that it can run on currently main stream web browsers. So, the students can test their code on any of the major web browsers and purely focus on the key part for the development of a computer graphics system: object modeling. A comparative study between the traditional and modern technologies is carried out over four classes whose sizes varied from 40 to 20 over the past four years. The performance of the class is measured in several ways: the average marks of the class, feedback from students and external examiners, and the comments from the examination boards. The comparative study shows that the average mark of the class over the assignment has been significantly improved from 60.66% in 2012-2013 to 78.44% this year. These results clearly show that the latest technologies do help students to effectively learn, and thus we should embrace the latest technologies for the teaching of the advanced computer graphics modules. This finding will be encouraging to those who are hesitating whether to adopt the latest technologies for the teaching of the advanced computer science and other modules.

Keywords: Computer graphics, open source software package, latest technologies, module assessment, effective learning and teaching.

THE LEARNING PERFORMANCE VECTOR: THEORY-BASED LEARNING ANALYTICS TO PREDICT THE INDIVIDUAL LEARNING HORIZON

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Abstract
Learning Analytics is one of the most promising major trends in educational technology. However, Learning Analytics is very often a rather statistical approach to the understanding of educationally relevant data. Theory-driven approaches are much sparser. In the context of the European Lea’s Box project (www.leas-box.eu), we aim at developing methods for analysing data coming from multiple sources on the basis of psychological theories from the area of Intelligent Tutorial Systems, namely Competence-based Knowledge Space Theory (CbKST) and Formal Concept Analysis (FCA). These well-elaborated approaches allow us to identify competencies on an atomic level, to establish structural, multi-dimensional knowledge spaces, and to identify individual learning paths and knowledge gaps. In this paper we introduce an approach to utilize the mentioned theories to predict learning paths, the Learning Performance Vector, and individual limits, the so-called individual learning Horizon.

Keywords: Learning analytics, competence-based knowledge space theory, formal concept analysis, learning performance vector, learning horizon.
A STUDY ON THE ENTREPRENEURSHIP EDUCATION OF JAPAN BASED ON THE CASE OF THE ENTREPRENEUR WHO WAS A NEET

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Abstract
Japan, as a country entrepreneurs are an extreme shortage, has been recognized from the world. So it is assumed important to increase entrepreneurship education in Japanese University. But various elements are contained in the entrepreneurship education of meaning and purpose. While recognizing the limitations of entrepreneurship education, it is important to clarify the subject of entrepreneurship education in Japan. The purpose of this paper is to consider the clues to solve the future of entrepreneurship shortage problem by the entrepreneurship education to NEETs (not in education, employment or training) and Freeters (part time worker). Approach of this study is based on the case of the entrepreneur who was a NEET through review of the prior research on entrepreneurship theories. As a result of the case study, it is proposed that the subject of entrepreneurship education are the person who became NEET left the company, and the person who became a NEET graduated from college.

Keywords: Secure society internal labor market, company in manorial system, negative liberty, positive liberty.

PROGRAM THEORY EVALUATION OF AN INNOVATIVE PRACTICUM MODEL FOR EARLY CHILDHOOD EDUCATION IN CANADA

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Abstract
This paper presents the results of the theory evaluation phase of a four-year evaluation of a practicum model in place within a College-level ECE Diploma in Québec (Canada). Designed in collaboration with multiple stakeholders (teachers, researchers and external members), the program evaluation employed a participatory and bottom-up approach (Chen, Klein, & Minor, 2009). After introducing the In Situ practicum program and the Quebec ECE context, the origins of the program and the difficulties in transferring learning from the classroom to the fieldwork setting identified as the problem theory will be illustrated. The process theory will follow, explaining how the In Situ practicum model targets reflexive practice and competency mastery in a real-world setting. Examples of techniques and learning activities that take place in this practicum will also be provided. The presentation will conclude with the outcome theory developed in order to plan the implementation and outcome phases of the program evaluation.

Keywords: Program evaluation, higher education, transfer of learning, early childhood education, quality.

TOURISM-ORIENTED POLICY, ECONOMY AND TOURISM ENGLISH IN JAPAN

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Abstract
Japanese has experienced economic slump (recession) for these 20 years. As a policy to overcome this situation, Japanese government creates a slogan “Japan as the tourism country”, and tries to increase the number of tourists from abroad and of international events actively. For example, the statistics of
International Congress and Convention Association (ICCA) shows that Japan held 337 international events in 2014, which is 1.5 times as many as 233 events in 2011, and that Japan was listed 7th country in the number of international events in 2014. In addition, Japanese government developed infrastructure and traffic network for tourism. As a result, readers of American tourism magazine “Travel + Leisure” chose Kyoto (Japan) as the place which they wanted to visit most for 2 years in a row.

By the way, “Tourism English (English for tourism or tourist)” and “Education of Tourism English” are important factors to promote such tourism policies. On the other hand, many Japanese can’t speak English well in contrast to Japanese economy is strong, so there are a lot of research tasks such as education method of Tourism English teacher development.

Tourism English is listed one of “ESP (English for Specific Purpose)”, so the education of Tourism English has different aspects from that of English for daily conversation. For example, Tourism English requires expressing hospitality mind that is essential in tourism; also it requires explaining things and ideas unique to Japan to foreigners clearly and correctly. Now, Japanese government and educational institutions in Japan research Tourism English, referring and absorbing to other countries’ researches. This thesis surveys previous researches first, introduces Japanese actions, and compares Japan with other countries prosper in tourism.

Japan has many world heritages with hospitality in Kyoto, Nara, Hokkaido, and Okinawa, also has important places related to “dark tourism” in Hiroshima, Nagasaki. However the number of foreigners who have visited such places is not so many. When Japanese policy for tourism improves, it can give positive affection for progress of world civilization. This thesis deals with the important theme in this sense.

**Keywords:** Tourism English, English for specific purpose (ESP), education policy, education system, English as foreign language.

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**INTEGRATIVE STEM EDUCATION: FOR CHILDREN AND COMMUNITIES**

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**Abstract**

Quality education is a key to the success of children and the communities in which they live (Havice, 2013, 2015). This is particularly true as it relates to integrative STEM (science, technology, engineering and mathematics) education. Integrative STEM education refers to engineering design-based learning approaches that intentionally integrate science and mathematics education with technology and engineering education. Integrative STEM education may be enhanced through further integration with other subjects such as language arts, social studies, art, etc. (Sanders, 2010, 2012, 2013 & Wells, 2010, 2013). Integrative STEM education involves problem-based and project-based learning that allows learners to explore real-world problems, simultaneously developing cross-curriculum skills while working in small, collaborative groups. Educators in Anderson, Oconee and Pickens (AOP) counties of South Carolina (USA) understand the importance of integrative STEM education to both students and communities. Over the past ten years, 455-plus K-12 classroom teachers, K-12 administrators and business/industry persons have participated in integrative STEM education institutes. Participants are developing knowledge and skills to create and implement relevant and innovative integrative STEM education activities for use in their classrooms.

**Keywords:** STEM education, integrated, STEM education, integrative STEM education, problem-based learning (PBL), project-based learning.
OPEN EDUCATIONAL PRACTICES: MOTIVATING TEACHERS TO USE AND REUSE OPEN EDUCATIONAL RESOURCES

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Abstract
The paper presents the Open Educational Practices (OEP) initiative that was implemented in Greece, as part of the national strategy for digital educational content in primary and secondary education. It aimed at encouraging and motivating teachers to develop and share OEPs that draw upon the use and reuse of Open Educational Resources (OERs), found either at the Photodentro national content repositories for school education or elsewhere. A new Photodentro Repository for Open Educational Practices on resource-based learning was developed and used by teachers to host and share OEPs. A model structure and a template for describing OEPs, along with a set of quality criteria for OEPs are proposed. The country-wide action “i-participate”, supported by a network of regional ambassadors and a web portal, and the 1st Hellenic contest for best OEPs in K-12 education are also presented.

Keywords: Open Educational Practices, OERs, resource-based learning, Photodentro, Open Badges.

A CRITIQUE OF THE TRANSITION FROM THE UNIVERSITY’S TRADITIONAL, LABOR-INTENSIVE LECTURE-BASED SCIENCE (e.g., BIOLOGY) COURSES TO AN IN-HOUSE “ONLINE COURSE” MODEL

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Abstract
Traditional biology lecture formats in which the professor draws diagrams, makes lists of key points, explains complex phenomena, and entertains class discussion are being replaced by a format that closely resembles a contemporary online course. PowerPoint (Ppt) presentations read off the screen by the professor and multiple-choice exams generate a separation between the professor and the student’s learning experience, as occurs in contemporary Online courses. Many of forces that promote that separation are reviewed as well as possible alternative models that provide a shared learning experience for both the student and the professor.

Keywords: Online course critiques, science-course outcomes, improving labor-intensive science teaching, electronic teaching aids, core learning competencies.

SOMETHING NEW OUT OF AFRICA: THE AFRICAN STORYBOOK INITIATIVE AS A CATALYST FOR CURRICULUM MAKING

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Abstract
The vision of the African Storybook (ASb) initiative is for every African child to have access to stories in a language they know well so that they can practice their reading skills and learn to love reading. Under the leadership of the South African Institute of Distance Education (Saide), open access digital texts for early reading have been sourced from and translated into many of Africa’s local and regional languages and uploaded onto a comprehensive website which also has tools for story creation and translation. Users of the website are able to create new stories or to translate existing stories into local languages and thus to
contribute to the growing numbers of stories available to teachers, parents and librarians. While the on-going development of the African Storybook website (www.africanstorybook.org) is the major innovation, the focus of this short paper is on innovative use of the resources of the ASb as a catalyst for the professional development of teacher-researchers through engagement in action research projects, one located in a teacher education programme in South Africa and the other in two primary schools in Uganda. Findings from a thematic analysis of data from each project (teaching materials, translated stories, transcribed interviews and researcher field notes), are drawn on to argue that access to a website which has both a bank of stories in local languages and tools for the translation, adaptation and creation of openly licensed stories, together with access to external consultants to support the research process, has enabled teacher-researchers to shift their professional identities from curriculum takers to curriculum makers.

*Keywords*: African Storybook initiative, open access digital texts, curriculum making, teacher professional identity shifts.

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**INSTILLING VALUES FOR SUSTAINABLE DEVELOPMENT: TRANSFERRING AN ESD ART-INSPIRED EDUCATION MODEL TO NONINDIGENOUS CULTURAL CONTEXTS**

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**Abstract**

In 2005 the United Nations Decade of Education for Sustainable Development (UNDESD) was established with a focus on the school’s role in educating children to become thoughtful stewards of the natural environment. At the close of that decade and the beginning of the Global Action Program (GAP) decade, methodologies with the capacity to effectively reflect policy are of particular interest to educators, especially methodologies from indigenous sources with transfer potential. This study investigates a Japanese indigenous ESD methodology and its potential for transfer to other cultural settings, suggesting that existing methods can be adopted and adapted for use outside of their original cultural setting. The method in question, as performed in a preschool setting, is in effect an ESD practice that lays a foundation for ESD values during the early education years when children are just beginning to form their most basic impressions of the environment and their place in it.

*Keywords*: Sustainable development, ESD (education for sustainable development), indigenous, transference.

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**EURO4SCIENCE: USING FORENSIC SCIENCE AS AN EDUCATIONAL STRATEGY**

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**Abstract**

According to the European Commission, around six million young people drop out of school each year – about 14% of all pupils. Besides the costs and negative consequences to individuals, this phenomenon hinders economic growth and competitiveness.

Due to the popularity of crime television shows, such as CSI: Crime Scene Investigation, teenager students are particularly open to the forensic “CSI” thematic and iconography.

With Euro4Science, we developed an educational strategy inspired in forensic sciences and aimed at mitigating early school dropout while promoting interdisciplinarity and cultural exchanges, favoring social inclusion and keeping close links to each school curriculum.

The Euro4Science project is an European strategic partnership (Erasmus+) that is, it includes schools, university, associations and private companies with a common goal of improving education innovation.
Following a 6 month test period in a university laboratory environment, a Beta Version of a Forensic Science Education Toolbox was applied in a series of teacher’s workshops involving three partner countries (Portugal, UK and Bulgaria).

The Forensic Science Education Toolbox allows and encourages the use of recycled and/or affordable price materials enabling its exploration by schools in different stages of educational and lab resources. The inclusion of a diversity of topics from physics, chemistry, biodiversity, genetics and societal challenges of modern science and technology encourages interdisciplinarity.

A total of 85 teachers from different subjects such as: Biology, Geology, Physics, Chemistry, History and English, attended the partnership core and dissemination workshops.

Results from teacher’s workshops evaluation show there are significant perspectives of good applicability to different national secondary (and even basic) school curricula.

The Euro4Science project culminates with so called “CSI Weeks”, science fair weeks where students from each participating country demonstrate their forensic school year projects to a public composed by foreign colleagues, local stakeholders and especially younger students.

Euro4Science is devoted to spread, as widely as possible, this forensic science educational motivational strategy in particularly to less developed countries.

**Keywords:** CSI effect, Euro4Science, transdisciplinarity.

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**THE ROLE OF THE HUNGARIAN INSTITUTE FOR EDUCATIONAL RESEARCH AND DEVELOPMENT IN SUPPORTING THE STATE EDUCATION SYSTEM**

**Erika Pálfi, Viola Bozsik & Fanni Sólyom-Nagy**

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**Abstract**

The Hungarian Institute for Educational Research and Development (HIERD), operated and maintained by the state, is an institution providing general and strategic support services for the educational sector. The present study intends to introduce the contribution of the institute to the state education system. In the past years, the role of HIERD has significantly grown in this area with the drafting of a unique textbook development model, the renewal of methodological journals, the development of an online learning supporting system and the fulfillment of professional tasks with a national impact.

**Keywords:** Public education, textbook development, National Public Education Portal, pedagogical support, pedagogical periodicals.

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**ACADEMIC CAPACITY BUILDING IN LIGHT OF THE CAPABILITIES APPROACH**

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**Abstract**

The paper recounts how I have been contriving to guide young academics to frame conceptual-theoretical frameworks that might help them contextualise an educational problem or situation under investigation and to challenge the theoretical and practical issues in that particular area of scholarship. In the process, I work on the assumption that the purpose of research is to attempt to falsify existing theories and to develop new ones to replace them if necessary. I also relate how I have used the capabilities approach to guide me through the academic capacity building effort.

**Keywords:** Academic capacity building, capability, capability theory, adult education, theory.
GENERATED CONFLICTS IN IMPLEMENTING NEW CURRICULAR REFORM TEACHING PRACTICES

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Abstract
Studies at the national and international levels conducted over the past 30 years have shown the necessity of working with students’ parents to promote school achievement and perseverance and even more importantly in times of curricular reform. Furthermore, in order to better face these new challenges, research indicates that the school should act as a learning organization and encourage discussions and collegiality between its various actors (complementary services, counselors, teachers, parents and students). The new curricular prescriptions are changing the established dynamics between the actors and are likely to introduce tensions that must be resolved at the collective level. A two-year study analyzed two Quebec science teachers’ agentive actions taken to meet the curriculum demands with their 256 students by introducing a novel teaching sequence. Although appreciated by students, its implementation provoked conflicts at another level. The current study aims at gaining understanding of these tensions that arose following the introduction of new actions and that emerged from the clashed values promoted by the school board and the parents. Data were collected during formative interventions using four in-depth interviews with two science teachers conducted in the year 2011 and then in 2012. Analyses were based on Vygotsky’s (1978) individuals’ zone of proximal development. The results highlight the need to move across boundaries and to adopt Engeström’s (2000) collective activity systems that will allow all actors, including parents, to identify common grounds and to make sense of the new science teaching approach aiming at promoting students’ autonomy, critical judgment, and school success levels.

Keywords: Curricular reform, tensions, school communities collegiality.

OBSTACLES HINDERING TQM IMPLEMENTATION IN SECONDARY SCHOOLS IN SAUDI ARABIA

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Abstract
In its quest for continuous improvement and quality, the education sector has been adopting modern management methods, such as Total Quality Management (TQM). The Kingdom of Saudi Arabia (SA), along with many other Arabic speaking countries, has made strategic investments in the country’s education system to leverage TQM principles, in order to meet international standards of efficiency and effectiveness. Despite substantial investments, the implementation of TQM in the education sector has not achieved the promised benefits. Some suggest this may be related to TQM’s origin in manufacturing. This study aims to explore the nature of the obstacles that impede the implementation of TQM in the public education sector in Saudi Arabia, and the critical success factors needed to overcome them. The study includes a review of the published literature to identify factors and barriers that may affect quality change programmes in education institutions. A field study was undertaken within secondary schools and in the Education Ministry of Saudi Arabia to assess these factors and barriers. This involved a questionnaire, with a selection of seventeen obstacles often cited in the literature which affect quality change programmes in education institutions. The questionnaire was distributed as a hardcopy to secondary schools in the different regions of Riyadh. Sixty one headteachers ranked their top ten most significant obstacles in order of importance. The result of the ranking was statistically analysed. Four major obstacles: Top Management Commitment; Training; Tools and Techniques; and Reward and Recognition were identified as substantially hindering the TQM programme within the secondary schools. This result was further validated through interviews with headteachers and Education Ministry officials. They confirmed that the result was an accurate snapshot of the current TQM state. This study suggests that, if the investment in TQM is to deliver the promised benefits in secondary schools, then further work
to improve Top Management Commitment is a priority. However, this must be done in a way that Top Management Commitment is understood and practiced in the Saudi cultural environment. The authors are developing tools and techniques for recognition and reward systems, to improve TQM in the public education system in SA.

Keywords: Total Quality Management, schools, obstacles, education, headteachers.

MEASURING LEARNING GAIN IN ACTIVE CITIZENSHIP IN HIGHER EDUCATION

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Abstract
This paper tackles the tricky issue of learning gain, which is being explored at a modern university in the UK through an employability initiative. This initiative focuses on the graduate attribute Active Citizenship, which is explored using a tool to measure students’ learning gain in this area. The research is based on analysis of students’ cognitive, pragmatic and attitudinal engagement with Active Citizenship. During the pilot phase, cognitive interviews were conducted with 20 undergraduates from different subject areas to investigate how survey questions would perform as part of the instrument. A total of 923 undergraduates participated in the main survey. Exploratory Factor Analysis (EFA) will be conducted on the survey data to test a three-factor structure: (1) Knowledge and awareness of different perspectives/ cultures/ values, (2) Actions taken within the community, and (3) Proactive attitude to improve society. This factor analysis draws upon theoretical support from the European Commission (1998). The research supports the higher educational goals of encouraging alumni to be active citizens, and has ramifications for the sector as a whole where employability is growing in importance, and employers are increasingly seeking ethical and social engagement. The research reported here also gives a voice to students themselves in the learning gain debate, which is a surprisingly rare undertaking. In addition, the attribute Active Citizenship is an important and challenging focus for engaging students in initiatives that promote leadership in a contemporary globalised context. This paper will interest not only higher education practitioners, but also researchers in learning gain and education for sustainability.

Keywords: Active citizenship, employability, higher education, cognitive interview, survey.

ENTERPRISE PORTFOLIO – A NEW LEARNING MODEL FOR MULTICULTURAL SKILLS AND WORK LIFE CO-OPERATION

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Abstract
The purpose of this paper is to introduce a multicultural learning and work life co-operation model which was designed for a degree programme students at Lahti University of Applied Sciences. The paper describes the model, the Enterprise Portfolio (EPF) and its background, goals, piloting process and experiences. The model aims to improve foreign students’ readiness to find employment in Finland after graduation. The idea is to provide students with a chance to learn Finnish and to develop their multicultural skills by involving them in teamwork with Finnish students. Additionally, they will have the opportunity to make Finnish working life contacts at the beginning of their studies. The secondary aim of the model is to develop Finnish students’ multicultural skills and to improve their English language communication skills as well. EPF is based on the learning model called Yritisportfolio (YPF) which was developed at Lahti University of Applied Sciences for Finnish business degree students. The idea of YPF is to combine first year business studies with the practices of working life. In EPF, foreign and Finnish students form multicultural teams in order to gain experience in working in a multicultural environment and to improve
their Finnish and English language communication skills. When a team is formed, it looks for a company to co-operate with and gathers business information about it by visiting the company and interviewing the company’s representatives. As a result, the company receives documentation and development suggestions as an online portfolio.

The EPF was piloted during the academic year 2014-2015. Based on the student survey and the feedback workshops the EPF successfully reached its goals, but improvements have been planned and will be implemented in the academic year 2015-2016.

Keywords: Learning model, multiculturalism, working life, language skills, teamwork.

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**APPROACH TO STUDYING AND FLIPPED CLASSROOM: AN EXPERIENCE IN UNIVERSITY**

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**Abstract**

This research aims to describe, through the use of quantitative techniques, which components of the self-regulated approach to studying (organization, preparation, self-assessment, strategies, metacognitive sensitivity) characterize university students who accept a different form of teaching that can be supported by the use of technology. These components have been identified through the use of the standardized approach to studying questionnaire QAS from the battery A.M.O.S. Ability and motivation to study assessment and guidance (De Beni, Moë, & Cornoldi, 2003). The research involved the participation of 129 students who voluntarily chose to participate in an experimentation of a teaching unit, activated during the academic year 2014/2015 at the University of Salento, using a flipped methodology: a pedagogical approach structured as a form of blended learning that is gaining popularity also in the academic education. The paper will offer also a pedagogical reflection on the strengths and weaknesses of this innovative methodology in the improvement of teaching in schools and universities.

Keywords: Flipped classroom, metacognition, teaching, approach to studying, self-regulated learning.

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**EMBODIED EDUCATION THROUGH ART AND THEATRE: “E.M.I.”, EXPERIMENTATION OF A MULTIMODAL INTERFACE**

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**Abstract**

In the contemporary world, Internet and digital technologies seem to amplify the possibilities of learning for the New Generations, the "Digital Natives". But does the so-called "augmented reality" mean increased intelligence but reduced humanism? (Benassayag 2016). The research “Embodied Education through art and theatre” attempts to create an experiential (embodied) background, starting from the relationship between the artistic and theatrical languages, the neurosciences and the discovery of the MNS Mirror Neuron System (Gallese, Rizzolati 1996), in order to offer a contribution for an enactive (Varela, Thompson, Rosch 1991), creative, multimodal learning. The Embodied Simulation (a common underlying functional mechanism that mediates our capacity to share the meaning of actions, intentions, feelings, and emotions with others, thus grounding our identification with and connectedness to others (Gallese 2014)) tells us that at the basis of the understanding of the world, there are the representation of the aim and the sensory-motor involvement, motor and intentional basis of learning, that art and theatre express through pre-linguistic instruments: images and actions. In the last years, the educational sciences and the cognitive sciences have intensified their connections to the point of identifying (Fischer, Daniel, Immordino-Yang, Stern, Battro, Koizumi 2007): this common field concerns the classical themes of learning, memory, attention and language, but also the themes of consciousness and body. The theoretical and empirical research, arisen at the end of the XXth Century, and now developing in cognitive sciences, is causing the change of the research interests from the brain study itself to the study of an ecological mind, of an interdipendent mind between body and environment: the focus is the concatenation
mind-body-environment, the extended mind. In the amplified reality and intelligence of 21st century we need an "interface between digital and living model" (Benassayag 2016): during the first phase, the pilot study had the goal to identify the experiential learning to be tested in the experimental research. E.C.O. Electronic Cooperation Online mainly supplies visual tools in a learning environment embodied, using the web and network as a creative ground: from A.R. augmented reality to M.R. material reality. The action-oriented training is integrated in the kinesthetic channel with theatrical techniques (Alschitz method). The resulting experiential training E.M.I. Experiential Multimodal Interface integrates virtual and material learning environments as example of creative education practice.

**Keywords**: Embodied education, art, theatre, multimodal interface.

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**PIONEERING AUTHENTIC EDUCATION**

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**Abstract**

Education comes from the word educare...which means to draw forth or lead out. Education is a calling...a vocation of passion for individuals who care about our next generation and our collective future. Educators today are so often bogged down by the subjects they are teaching that they often forget they are builders of this most important future. The young people are not only inheritors of our past but are also our initiators into the next phase of cultural evolution. They are the architects for the coming phases that include social, cultural and global development. They have the potential to no longer imitate what has come before them but rather imagining the scaffolding for structures that lead us into a better future.  

If we are to change our behaviors then our education must change. Our systems need to reflect this deepest understanding of what it means to be human and to live at a time when the true essence of a global society is truly the interconnectedness of all intentions and deeds. There has been an on-going evolution for the need for moral education and the rising potential of the empowered voice of individuals. To take this deeper is to know that the next relevant educational model is to educate for tapping into higher consciousness and translating the experience into societal actions for external global harmony.

The Millennial Generation, the next generation, is able to foster the shift in humanity's consciousness. We are learning from science that we are interdependent and interconnected as one life. The human genome project has proven that we are genetically 99.9 percent alike, with only one tenth of one percent making us different. Only when we concentrate on what makes us the same, instead of what makes us different, can we deal with the challenges ahead. As students move inward to discover their true Authentic Self so they are able to become the motivators that build a better future. The model of Reflect-Connect –Act is a training process to empower and enrich students to realize their inner potential as well as building educational institutions that better serve the generations coming. Downloading information and structured learning is no longer that relevant in this technological era. It is time to use the information era as a means for individuals for fostering their personal growth and encouraging the understanding that we live mentally, physically and emotionally connected and to build a global arena that considers all peoples. It is imperative that we spend our time and resources on young people, supporting leadership and educational experiences that promote respectful communities, common ethics, sustainable practices, peace, and economic opportunities.

Altering our educational philosophy for “Authentic Learning” becomes the source of teaching rather than the present day practice of schooling for information. Educators are the forerunners of building culture. As an educator, I define several modes or models for thinking about this potential. These modes or models are terms used to help categorize activities for use within the classroom setting and included in the model for Authentic Learning. An important conceptual model is “inquiry learning” and/or “reflective learning” that emphasizes the truth and acceptance that we each have an inherent wisdom. This wisdom needs to be explored and supported. Teaching needs to focus on asking the right questions and offering the resources. Thus the teacher becomes a facilitator rather than the instructor. As a result of the reflective process for “altruistic learning” occurs implying to serve another’s needs is equivalent to serving one’s own needs. Another aspect of Authentic Learning is “experiential learning” that allows the learner to experience learning on a deeper more intense manner using experiences as a source for reflection and acquiring information. Examining the world and reaching personal and social conclusions leads to the needs for each individual to know and understand their relationship within the whole. Included in this
thinking mode is “systems learning” so that we educate for the understanding that all parts belong to a whole. Holistic thinking is a process that allows us to incorporate the self while learning that the whole is greater than all of its parts within a system. Another model for thinking and including in building true authentic learning style is “transpersonal learning”. This includes personal and interpersonal relationships as a means for learning about the self in relationship to the others for the building a future culture. All these models working together educate the individual learner to invent ideas while serving the greater good. Examples of Authentic learning educate for processes of REFLECTION, how to CONNECT in relationships to others and then to translate these skills into behavioral ACTIONS that serve the self and the greater society for positive change.

The Reflection phase is a process of selecting guided visualizations, meditations, or prayers appropriate for use in the schools. Young people begin by hearing their own inner guidance and learn to sense their personal goodness. This in relationship to self-esteem is a more guaranteed manner to experience one’s own self value. The process can be done on a daily basis.

The Connection phase is learning the skills necessary for building positive friendships. This section gives tools that are helpful for learning non-violence techniques of communicating as well as tools for working within a group.

The Action phase is for students to learn that they are truly relevant and can make a difference in the world. They learn how to develop plans of action that will make a difference in a larger context whether it be their school, community or the world at large.

Authentic Learning prepares students to take personal and collaborative leadership in this emerging changing global culture with all its difficulties and positive potentials.

**Keywords:** Authentic, education, ethics, spiritual activism, youth, educational model.

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**FOCUS ON FORMATIVE FEEDBACK COMMUNICATION AND SELF-REGULATED LEARNING – A STUDY IN COMPULSORY SCHOOLS**

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**Abstract**

This study addresses the conceptual challenge of providing students in compulsory schools with good quality formative feedback to enhance self-regulated learning in social interactions. Recent educational research indicates that social communicative interactions in the classroom, with a focus on formative feedback, hold the potential to enhance students learning. Self-regulated learning is highly pertinent and can be seen as one of the most important skills for the 21st century learner. We argue that formative feedback communication in interactions is crucial for students to develop self-regulating skills and that feedback is not only something the teacher gives to the student. We refer to this as formative Feedback communication. As a basis for exploring identifying and discussing relevant aspects of formative Feedback communication to enhance student self-regulating learning skills we analyze qualitative data from video-recorded teaching sessions and student group interviews. Methodologically we are inspired by the ethnographical classroom research method. The empirical basis for studying these aspects is data from two compulsory schools in Denmark. This study is a work in progress. Our findings suggest that students can develop self-regulation skill by focusing on three key aspects: 1) Maintain focus on meta-reflection, 2) maintain focus on the construction of meaning and 3) rubrics can support self-regulated learning in group work.

**Keywords:** Feedback, self-regulated-learning, communication, compulsory school.
FREE-CHOICE LEARNING IN INTERDISCIPLINARY PROJECT LABORATORIES

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Abstract
In this paper we present a teaching method, which is consequently based on free-choice learning of the students. It is characterized by a very active participation of the students in the teaching process. Two consecutive courses are offered in the context of natural science and technology. However, the subject matter of these courses is not an expert knowledge of a special scientific discipline, but acquiring soft skills. Course participants get a methodological background and learn general fundamental methods to solve a problem.

Keywords: Student-centered learning, free-choice learning, project work, soft skills, interdisciplinary.

EARLY CHILDHOOD EDUCATOR TRAINING: AN IMPLEMENTATION EVALUATION OF A PRACTICUM MODEL USING REFLEXIVE PRACTICE

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Abstract
Research in early childhood education (ECE) highlights initial training as a key predictor of quality (Mashburn & Pianta, 2010). This training is more effective in active learning contexts that integrate collaboration in a real world setting and reflexive practice as this type of training seems to enhance transfer of learning, as well as educational quality (Birman, Desimone, Porter, & Garet, 2000; Pianta & Hamre, 2009). Nevertheless, little is known about how to implement a reflexive model in ECE. In order to address this gap, an implementation evaluation single case study was conducted. According to program evaluation theory, implementation evaluation aims to describe what is really happening on the ground and to compare it to a logic model (Chen, 2005) in order to support the interpretation of the outcome evaluation (Tourigny & Dagenais, 2005). More specifically, implementation evaluation is interested in the relations between the program, its components, and the context with regard to the production of the effects (Contandriopoulos, Champagne, Denis, & Avargues, 2000). Since 2005, the Department of ECE at Saint-Hyacinthe College (Quebec, Canada) has implemented an innovative practicum model. This model is unique in Quebec, as it was developed to address knowledge transfer difficulties by mobilizing teacher guidance and reflexive practice. This In Situ practicum takes place in a drop-in daycare centre on the college campus that is completely dedicated to the program. The centre serves children and families from at-risk backgrounds who were signalled to the Director of Youth Protection for neglect, as well as refugee families who attend a community integration program. This communication will present preliminary results of the implementation evaluation process that aimed to verify if the college instructors effectively and uniformly employ the activities and learning strategies that they developed. Data include observations of six instructors in the program and questionnaires about cohesion and engagement to their work completed by the same instructors. Eleven students completed the same questionnaires and also evaluated the quality of their instructors’ teaching strategies. Results indicate that instructors used learning strategies uniformly and in conformity with the logic model theory, and that the quality levels of those strategies were excellent. We also found superior levels of cohesion and engagement in the instructor and student groups. Moreover, the student’s evaluations of the quality of their instructors’ strategies also revealed high scores. This paper discusses the detailed outcomes of this program implementation evaluation.

Keywords: Implementation evaluation, higher education, transfer of learning, early childhood education, quality.
AGILE HIGHER EDUCATION: AN IMPLEMENTATION STUDY AT SHAOXING UNIVERSITY, CHINA

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Abstract  
The expansion of higher education provides more opportunities for young people, and meanwhile, brings many problems to itself as well as to society. One of the problems is the disconnection between the supply and demand of graduates of higher institutions. Due to the fact that agile manufacturing has been proved successful in manufacturing industries, the idea and methodology of agile manufacturing is transplanted into higher education to improve the agility of higher institutions in this paper. Implementation work of agile higher education has been done in the past five years at Shaoxing University, China. Virtual organization is applied to reorganize academic resources at the university to improve the agility of program construction. Mass customization is used to reform the curricula of all programs to provide a solution to efficiency-diversity dilemma and let students postpone finalizing their learning in a program to meet the needs of labor market as much as possible. The implementation study shows that the proposed way of agility improvement is significant and effective to a kind of applied higher institutions in mass higher education time.

Keywords: Agile higher education, program reconstruction, curriculum reform, China.
TEACHING AND LEARNING

TRILINGUAL EDUCATION IN HONG KONG PRIMARY SCHOOLS: CASE STUDIES OF CODE-MIXING/CODE-SWITCHING

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Abstract
As an international city, Hong Kong has three official languages: Cantonese, English and Putonghua. Since the handover in 1997, the Hong Kong government has adopted a “biliterate and trilingual” language policy, aiming at enabling Hong Kong residents to become biliterate in written Chinese and English, and trilingual in Cantonese, Putonghua and spoken English. In Hong Kong schools, students are expected to achieve good proficiency in all three languages, but in the classroom, most schools would adopt the so-called ‘One-language-at-a-time’ policy, emphasizing that for a particular subject, only one language should be used as the medium of instruction (MoI), and mixed code should be discouraged, or even banned. However, many students and even some teachers do not seem to follow this guideline, and code-mixing/code-switching occur regularly in the classroom. Based on a survey of 155 Hong Kong primary schools we carried out, it is found that the Chinese subject teachers in 23 schools (14.84%) claimed that they would switch between Cantonese and Putonghua in teaching Chinese. For the English subject, teachers in 53 schools (34.19%) claimed that they might switch between Cantonese and English in teaching the English subject. For the Putonghua subject, teachers in 7 schools (4.52%) claimed that they would use both Putonghua and Cantonese, but only in junior grades. For senior grades, they would use Putonghua only. We are aware that the survey data may not fully reflect the reality about the use of mixed code in primary schools, given that the official policy is to avoid the use of mixed code. To find out the real situation in the primary schools, follow-up case studies were carried out in three of the previously surveyed 155 schools. A questionnaire survey on students’ perceptions of code-mixing/code-switching in trilingual education settings was administered in the three schools, and follow-up student focus group interviews were conducted. We also employed ethnographic field research data analysis, classroom discourse data analysis, and teachers’ reflection data analysis to find out how code-mixing/code-switching had affected students’ language development in the three schools. The research findings suggest that the degree of students’ acceptance of code-mixing/code-switching varied across the three schools, but overall they seem to find code-mixing/code-switching beneficial to their language development. Also, there seems to be contradictions between schools’ language policies and the teachers’ and students’ actual practices in the classroom. It is hoped that this study will contribute to the literature on the study of code-mixing/code-switching in multilingual education context.

Keywords: Code-mixing, code-switching, Medium of Instruction (MoI), trilingual education, Hong Kong.

FRENCH CANDIDATE TEACHERS’ PERCEPTION OF AUTONOMOUS LEARNING AND THEIR STRATEGY USE

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Abstract
The purpose of this study is to explore the relationship between the perceptions of future French teachers regarding autonomous learning and their strategy use. Autonomous learning has been one of the most prominent areas of interest in language learning and teaching for a few decades. In 2001, the Common European Framework of Europe (CEF) defines autonomy as an ability to plan and monitor learning progress and evaluate learning outcomes. Additionally, an autonomous learning involves the effective use of language learning strategies, particularly metacognitive strategies. Quantitative data was gathered from 60 Turkish university students of French Teacher Training Department of Anadolu University (Turkey). In order to identify students’ perception of autonomy, a questionnaire (Üstünluoğlu, 2009) consisting of three parts; responsibility, ability and activities was employed. Language Learning Strategy Inventory
developed by Oxford was also administered to find out to what extent students use learning strategies. The results reveal that the perception of students concerning autonomous learning does not differ significantly according to their strategy use.

**Keywords:** Learner autonomy, learning strategies, language learning, teaching French, cognitive approach.

### LEARNING GERMAN AND ENGLISH IN THE AMAZON JUNGLE: A CREATIVE WORKSHOP IN BRAZIL

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**Abstract**

Our proposal describes an innovative education project based on the teaching stream Education for Sustainable Development, as well as the improvement of the Communicative Competence in English and German as a Second Language and both Literary and Intercultural Competences by means of a workshop designed with this purpose. Therefore, the purpose of our communication is twofold: on one hand, to demonstrate the possibilities that a Creative Writing and Illustration Workshop offers for the development of Literary, Intercultural and Communicative Competences in Foreign/Second Language acquisition. Additionally, we describe the theoretical framework that the mentioned workshop follows. While our second objective, is to narrate how we organized, coordinated and held the Creative Writing and Illustration Workshop at the Faculdade Martha Falcao in Manaus at DeVry Brazil, based in the Task-based methodology. Finally, our results include how we have achieved (1) to promote the creation of connections for the consolidation of bilateral agreements between universities; (2) motivate the scientific collaboration with Brazilian institutions that have English and German Language Departments, and (3) use and create tools that may include the Education for Sustainable Development methodology.

**Keywords:** Education for sustainable development, task-based learning, creative writing, workshop, literary competence.

### AN ALTERNATIVE APPROACH TO ELT METHODOLOGY COURSE: COLLABORATIVE LEARNING PRACTICES IN A PRE-SERVICE TEACHER EDUCATION COURSE

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**Abstract**

ELT methodology courses have an important role in candidate teachers' professional and academic development as future teachers. In this study, the implementation of peer feedback in a 3rd year ELT Methodology Course is discussed with reference to candidate teacher's perceptions of peer feedback and how they developed in providing feedback as the course evolved. The depth and comprehensive analysis of candidate teachers' reports revealed the positive development in their peer feedback. In the first half of the course, when students were asked to give oral feedback on demo lessons, they focused on very general aspects of lesson conduct like the tone of voice, positioning and clarity of instructions. Towards the end of the class, the candidate teachers managed to catch more details related to different aspects of lesson conduct, such as setting and monitoring the tasks, choosing appropriate interaction patterns to foster interaction, classroom management problems. In this paper, the course design and examples of peer feedback will be presented to illustrate the changes and development in feedback quality and suggest ways of implementing a similar peer feedback scheme in different ELT Methodology courses.

**Keywords:** Collaborative learning, peer feedback, class observation, demo teaching.
EXPLORING POSTGRADUATE STUDENTS’ CHALLENGES IN DOING MASTER RESEARCH

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Abstract
Research activity involves investigation which gives impact to intelectuality, creativity and discipline among postgraduate students. The purpose of this study is to explore postgraduate students’ challenges while completing their Master Research in one of the public universities in Malaysia. The subjects of this study were 25 postgraduate students undergoing their dissertation which is a requirement to graduate. This study used open ended interview approach to explore the challenges on doing master research. For the analysis of the data, thematic approach was used to get information from the students. The study found that there are four main challenges that the postgraduate students face in doing dissertation which are different field, time management, lack of research knowledge and supervision. Most of the students reported that the field of research that they are doing is different from their previous knowledge. Students also found that it was difficult for them to balance their time between their job and studies. Another challenge is they have never explored the research when they are doing their degree. Students also said that they have to wait for a long time for the appointment of their supervisor. These four challenges are contributing factors for postgraduate students in completing their dissertation and therefore universities need to come up with a more effective strategy to help these students overcome the challenges in order to produce intellectual and skilled researchers.

Keyword: Master students, challenges in doing research, time management, knowledge, supervision.

AFFECTING L2 LEARNING MOTIVATION

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Abstract
When explaining success or failure in second language learning, “motivation” tends to be the focal point not only for the teachers but also for students alike. This paper is based on the author’s experience teaching the same material (TOEFL ITP) to two cohorts of university English language learners. Interestingly, one group retained and as a matter of fact, some of them even increased their motivation as time went by, whereas the other group lost interest by the end of the semester. By the same token, the author’s feelings and attitudes towards the learners were also gradually affected. The author conducted an in-depth investigation regarding the reasons surrounding the motivational factors of the students as they relate to their academic performance. More specifically, what kind of factors can be regarded as positive and negative factors both for the learners and for the teacher was further analyzed.

Keywords: Motivation, feelings, attitudes.

ACADEMIC EDUCATION 4.0

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Abstract
4.0, this code had initially been used to mark the disruptive change, which takes place in the manufacturing industry through the pervasive application of Information and Communication Technology (ICT), coining the term Industry 4.0. Since then 4.0 has been applied to many other fields, which are equally affected by the rapid changes we are facing in the world of today in general, such as Work 4.0 or Healthcare 4.0, you name it.
As academic educators we have to confront the same changes and we are bound to undergo the necessary adaptations (although it often seems, as if many of us were not willing to accept this fact to its full extent). When rethinking academic education to meet these future challenges, we developed a set of propositions, to describe the fundamental principles we should follow, if we want to prepare our students for the future. Incidentally, some of these principles parallel those from industry 4.0.

**Keywords:** Academic education, complexity, transdisciplinarity, self-organization, meta-knowledge.

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**POSTGRADUATE STUDENTS’ ATTITUDES TOWARDS RESEARCH IN PUBLIC UNIVERSITY**

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**Abstract**

Many postgraduate students find it difficult to master the knowledge of carrying out research especially when they have to write their thesis. This attitude causes adverse effects in the completion of their research. The purpose of this study is to identify the level of students’ attitudes in doing research. This study also identifies the relationship between research usefulness for profession, research anxiety, positive attitudes towards research, and research difficulty. This study involves 150 postgraduate students from five public universities in Malaysia. The questionnaire consists of research usefulness for profession (9 items), research anxiety (8 items), positive attitudes towards research (8 items), and research difficulty (8 items). This instrument uses a 7-point scale which ranges from strongly disagree to strongly agree. Overall, this study shows that postgraduate students’ attitudes towards research are at moderate level where majority of the students still feel that it is difficult to complete their research. Findings show that there is a positive significant relationship between research anxiety and difficulty of doing research, and between usefulness and attitudes towards research. There is a negative significant relationship between anxiety and attitude. Even though this study shows that there is a relationship between all those variables, the relationship is low. This study shows that there is no relationship between research usefulness towards anxiety and difficulty of doing research and between attitudes towards research and difficulty of doing research. Overall, this study demonstrates how these four variables (research usefulness for profession, research anxiety, positive attitudes towards research, and research difficulty) in public university can permit postgraduate students to develop and enhance their research attitudes. It is possible that those who do move into postgraduate programmes where learning and research mode is more dominant than in undergraduate study, are more likely to succeed, having already gained an insight into the everyday reality of research.

**Keywords:** Research usefulness for profession, research anxiety, positive attitudes towards research, research difficulty.

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**SUPPORTING STUDENTS’ NEED FOR RELATEDNESS IN A BASIC ENGINEERING COURSE**

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**Abstract**

Due to the small amount of interest electrical engineering students find in the basic electric circuits course, the Department of Electrical Engineering at the Technion – Israel Institute of Technology has decided to incorporate into the course, for the first time, examples reflecting the various fields of study in the Department and the diverse occupational areas of electrical engineers. According to the self-determination theory, these examples may enhance students’ sense of relatedness to the Department and increase their intrinsic motivation and interest in the course. The method of teaching used in the course is the traditional lecture-based one, thus the course is substantially different from similar courses
developed recently that employ non-traditional ways to teach the topic of electric circuits, such as project-based learning or collaborative learning. The aim of the study described here was to identify the ways (if any) by which the teacher was able to raise students’ interest in the course. Seventy-two sophomore electrical engineering students took part in the study. Data were collected by open-ended, anonymous questionnaires and semi-structured interviews. The qualitative findings were categorized by content analysis. According to the findings, students found the improved course interesting thanks to the examples that were integrated into it. Their interest was derived from several sources: an acquaintance with the areas of teaching and research taking place in the Department, an initial exposure to an electrical engineer’s field of practice, and tying in the studied material to electronic systems familiar to the students from their everyday life. In light of the self-determination theory, the interest the course in its new format managed to raise among the students can be attributed to meeting the students’ need for relatedness during the course. The contribution of the research is in the characterization of simple and low-cost methods by which the teacher is able to raise the interest among students attending a basic course on electric circuits. This contribution is likely to be expressed in developing new basic courses on engineering and improving the existing ones.

**Keywords:** Engineering education, motivation, need for relatedness, basic course.

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**EXPLORING ACTIVE LEARNING METHODOLOGIES FOR LANGUAGE LEARNERS IN THE SCIENTIFIC CURRICULUM**

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**Abstract**

How do we effectively communicate and emphasize collaborative learning in the sciences and revitalize the classroom experience in the technology enhanced active learning environment of the 21st century? There is a shortage of highly qualified graduates from universities in the United States in science, technology, engineering and math (STEM) fields. These highly qualified graduates are crucial for national success, for making global contributions, and are essential to economic growth. A collaborative, engaged pedagogy perspective at the forefront of best practices focusing on shared learning experiences allows students to acquire knowledge and foster content and language success.

This pilot study will focus on hands-on science pedagogy at the university level. It will investigate cross-disciplinary teaching strategies that create a culture of innovation and include communication coupled with collaboration to strongly impact outcomes and inform practice as traditional learning is redefined. The research employs qualitative methods of primary and secondary data in a side-by-side case study analysis of three universities in the United States. A set of questions has been developed to undertake an open-ended investigation focusing on active, collaborative learning in science classrooms and the extent to which hands on activities are utilized to strengthen science content as well as communication and English language skills. Professors and students will be interviewed and specific hands on activities will be shared. For a number of capable students enrolled in science courses in USA universities, English is not the native language and adaptation of the curriculum for diverse abilities and learning levels is essential as employers expect a broad range of transferable competencies to prepare students for the global workforce.

The emphasis of this study is to investigate the instructional methods in the 21st century science classroom where curriculum design and teaching context relate to the utilization of hands-on activities and emphasize collaborative, active learning focused on exploring best practices and building a culture of innovation. In this investigation, these three university science programs will be compared and contrasted to analyze the extent to which hands on active learning methods are utilized emphasizing the evidentiary support for positive outcomes in both content and communication in the learning environment. The results and findings will be shared, as well as suggestions for this study to evolve and expand in further research as we continue to investigate and leverage ideas for innovative success utilizing hands-on learning to strengthen content and communication skills.

**Keywords:** Science education, pedagogy, collaboration, communication, engagement.
MODEL TO PREVENT AND SOLVE THE PROBLEM OF VIOLENCE AMONG CHILDREN IN PRIMARY SCHOOL

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Abstract
Information sources from the Bangkok area collected in 2014 reflected an increase in violent behaviors among primary school children, such as punching, slapping, hitting and quarreling with fellow students. The objectives of the research model are to prevent and solve the problem of violence among children in primary schools, to study and develop model to prevent and solve the problem of violence among children in primary school by using participatory research among schools, communities and responsible organizations. The research found that to succeed in preventing and resolving the problem, agencies and communities cannot work alone. It’s required that agencies to be responsible for the whole system and full cooperation in all levels that lead to developing a model of prevention and resolving violent problems for all. There needs to be an agency to regulate, supervise or support solving the problem in each specific component.

Keywords: Model to prevent and solve the problem, violence, children in primary school.

BILINGUAL LEARNERS' PERCEPTIONS OF SCHOOL ENVIRONMENT

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Abstract
There is a growing number of students who speak languages other than English in both rural and urban public schools in South Africa. This study investigated the perceptions of 120 learners (54 monolingual and 66 bilingual learners) from Grade R - 3 in an urban public elementary school in Motheo District, Free State province, with respect to school climate, curriculum and instruction, extracurricular activities, self-efficacy, and self-esteem. This is a qualitative study in which semi-structured interviews were used to collect data. All of these indicators contribute to an overall perception of schools and affect learning experiences of monolingual and bilingual learners. Results indicated that the perceptions of monolingual learners and bilingual learners in this particular elementary school are similar.

Keywords: Bilingual, monolingual, curriculum, self-esteem.

FOSTERING UNIVERSAL ACCEPTANCE OF EACH OTHER IN THE PRIMARY GRADES

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Abstract
Social Justice Instruction: Empowerment on the Chalkboard (2016), Springer International Publishing, is a book focused on the adult, elementary and adolescent learner. A feature of this book is the Key Instructional Practices and Strategies, birth to adulthood. This presentation will feature research by six authors in early childhood education highlighting specific strategies and practices that influence social justice among young children to foster a climate of universal acceptance.

Keywords: Early childhood education, developmentally appropriate practice, emotional learning, intentional instruction, social justice.
THE GOOD THE BAD AND THE UGLY - PRACTICES IN HIGHER EDUCATION

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Abstract
In this position paper we describe our experience on developing a newly-set-up learning environment within our University, and we provide examples of various practices within the areas of teaching, learning and assessment, student support, feedback provision, student engagement, staff development etc. Indicative examples of ‘good’ (as opposed to ‘bad’ and ‘ugly’ practices) with respect to the methods used to meet the learning objectives stated in programmes specifications are presented. All the above closely relate to the graduate profile agreed at our institution. This piece of work is aimed at every person who wishes to discover or reconsider the challenges involved in the transformation of an existing (or the creation of a new) learning environment in Higher Education. It is addressed to educators and educational leaders who are interested in exploring how an educational environment could be restructured, in order to fit the needs of students and staff in accordance with well-established and tested policies and practices in Teaching, Learning & Assessment.

Keywords: Best-practices in higher education, innovation in teaching, learning & assessment, challenges in organizational change, university graduates’ profile.

UNIVERSITY LEADERSHIP; THE CASE OF UNIVERSIDAD NACIONAL AUTONOMA DE HONDURAS1

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Abstract
The research tries to understand and explain the phenomenon of leadership in the context of Universidad Nacional Autónoma de Honduras (UNAH). This study uses the design of mixed method, based on a quality framework (rigor, reliability and validity). It describes the design in terms of the scope, purpose, priority and sequence of methods (quantitative and qualitative); and characterizes each method in terms of sampling, data collection and analysis. For both approaches, convenience sampling is used. The dominant theory (Transformational and Charismatic Leadership) is only used in the quantitative dimension; the Multifactor Leadership Questionnaire was applied to a sample of 149 observations in three levels (linkage) of the new educational model of UNAH. An Analysis of variance (ANOVA) was applied. In the qualitative dimension, the expanded system of leadership theories was applied in sixteen (16) interviews and five (5) focus groups allowing covering the different levels established in the educational model (Macro, Meso and Micro). Was also achieve to interview ten (10) males and six (6) females. Focus groups were integrated into five (5) groups for a representation of ten (10) men and nine (9) women, i.e. involving in total thirty-five (35) persons. Based on the results of this study, in the field of Leadership, we can identify the recommendations for future studies. In all organizations, independent of the sector to which it subscribe the leadership is a critical engine and causal determinant factor. The actual progress of the organization and / or institution depends critically in pushing the management team. With the analysis of the quantitative approach, it is demonstrated that on average, women score higher on transformational and transactional leadership compared to man, who also scored lower on leadership direction characterized by Exception Passive and Laissez-Faire. With the qualitative approach, the highest percentage of saturation was the so-called Transformational and Charismatic theory, and surprisingly a new category of centralized leadership was identified in an inductive way. The findings provide insights into the types of leadership that influence the educational model of UNAH, and could contribute to design higher education initiatives in terms of policy, programs and projects.

Keywords: Mixed method, transformational charismatic, and system of leadership theories.

1The article is derived from results obtained of the PhD thesis; Arias, C.E. (2014). Liderazgo Universitario hacia una gestión del desarrollo humano sostenible con excelencia: el caso de la UNAH. (Doctoral dissertation, Universidad Nacional Autónoma de Honduras). Retrieved from https://issuu.com/doctoradocssgd/docs/liderazo_universitario_hacia_una_g
ICT @ AN EARLY AGE (A NEW CHALLENGE FOR NIGERIAN GOVERNMENT) PROVIDING E-LEARNING CAPACITY TRAINING COURSES FOR TEACHERS WORKING IN EARLY CHILD CARE CENTRES IN NIGERIA

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Abstract

A primary focus of this paper is to highlight why the problem of Teacher’s ICT skills needs to be addressed and what experiences exist in using ICT for this purpose and the impact on children. ICT can be effectively used in the area of Early Child Care Education in Nigeria. The paper concludes by identifying strategies and planning elements that need to be taken into consideration when ICT are used for Teachers Literacy programmes.

Purpose: No real attention is given to Early Childcare Education (ECE). Nigeria’s Universal Basic Education (UBE) targets, 2004, stipulate that 50% of the teachers should be trained in computer skills. The national government regards ECE more as a primary responsibility of parents and other care givers. Its responsibilities are limited, rare in practice and often non-existence. Moreover, the skills and experiences of many teachers are in doubt as many of them are not professionally qualified.

By the end of the project 160 ECCC teachers will be trained, it is expected that about 2400 children will directly benefit from an improved learning environment within 20 ECCC. The final outcome of this first year is to set up an E-Learning Child Care Network in Lagos (ECCNL) which will allow the SPED to keep track and monitor the evolution of the trained teachers and provide them with refreshing training to enhance their performance in class rooms online.

Actions:
1. A Baseline Survey
2. Community Sensitization
3. Selection of qualified ECCC
4. Running E-Learning training workshops

Objectives:
1. Promote a healthy hygienic working environment
2. Provide new pedagogical approach
3. Facilitate interactive and participatory communication
4. Introduce time and activity management methodology

Goal: The training will enable the participants apply and evaluate their attitudes and skills in relation to the professional requirements of an early Childhood educator.

Keywords: Early, childhood, ICT, education, learning.
TEACHERS AND STUDENTS

ASSESSING GLOBAL FINANCIAL LITERACY - IMPLICATIONS FOR TEACHERS AND POLICY MAKERS

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Abstract
There is little debate that being financially literate can help citizens participate in everyday life. Such “twenty-first century” skills are increasing sought after by employers and there is no shortage of talk from policy makers. Yet the financial education of school aged students in many countries remains ad-hoc at best. As the number of available financial products grows, and the volatility experienced in financial markets continues, we have an obligation to ensure that our students have the skills to cope with, are prepared for, and are able to successfully navigate the world of personal finance.

Drawing on international data from the 2012 PISA Financial Literacy study, and lessons learned from attempts to incorporate financial education in Australian classrooms, the presenter will argue that by the time some countries get around to addressing such “twenty-first century” skills, we may well be approaching the twenty-second century.

Keywords: Assessment, international, PISA, financial.

DESIGN AND CONSTRUCTION OF TEST FOR TECHNOLOGY COURSE IN COLOMBIA

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Abstract
Education in Technology is essential to make citizens participate actively in society. Colombian Ministry of National Education (MEN) guidelines for Technology and Computer Science suggests competence and competency that a student must achieve, but it’s necessary to specify there are not performance indicators or another mechanisms to measure technological skills making teachers evaluate only superficial knowledge. This way is necessary to develop tools for helping teachers to measure technical competences levels proposed by MEN. Diagnostic tests involved 'Problem solutions by using technology' and 'Ownership and use of technology'. To make diagnostic tests design was necessary to build competency indicators and qualitative evaluation scale which establish the student level in each competency. Also for every competency a bank of questions was elaborated considering the goals proposed by PISA tests, these questions prevail problems solutions in context. Validation process was conducted in twelve schools of the country by implementing a pilot. Difficulty level of the test, the discrimination index and its reliability was established from the results and tools to correct and eliminate determined instrument. An autonomous assessment tool is been created from diagnostic tests.

Keywords: Evaluation, validation, test design, tool education.

AWARENESS RAISING IN THE CLASS CREATING BOOK RECOMMENDATION SLIDES BY MEANS OF POWERPOINT

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Abstract
This paper deals with the class where university students recommended books they are interested in by means of PowerPoint slides. In this course, they were required to create PowerPoint slides to introduce books by inserting animations and narrations. It applied active learning in combination with evaluation
and revision activities to enhance their computer skills, to raise awareness towards various types of skills necessary for problem solving and to nurture active thinking. It particularly aims not only to acquire PowerPoint skills but also to develop their skills in expression, project planning and suggestion. This paper informs of the content of the course and proves its effectiveness.

**Keywords:** Book recommendation, making PowerPoint slides, evaluation, revision, problem solving skills.

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**A MODEL FOR PERFORMANCE ASSESSMENT: A CASE OF PROFESSIONAL MUSIC TRAINING PROGRAM**

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**Abstract**  
The goals of a professional music training program are designed to prepare students to present performances of music as a featured soloist, educational content of programs in alignment with the requirements of the professional world. Ideally, a professional music training program fosters high quality skills in playing the instrument with preferences and capabilities towards a more musician oriented career or more pedagogical career regarding their qualities and skills. To measure the efficacy of a professional music training program, the use of the Associated Board of the Royal Schools of Music (ABRSM) Performance Assessment based on nationally recognized assessment principles and procedures to evaluate student skills in university music training courses in regards to literature, musical styles, playing technique, or eventually operational contexts relative to a music education. The achievement criteria presented generally accurate contrasting performances, demonstrating a range of technical skills, and appropriate musicianship and presentation skills. The assessment procedure will be accompanied by the on-going development of exemplar material for all standards, and opportunities for teacher professional development and dialogue to assess and refine music-inquiry processes of course content. The procedure resulted in an assessment system for benchmarking accumulate evidence of performances in students’ work and offered insights into the effect of professional music training courses on student knowledge and understanding of the musical style. The findings demonstrate a true assessment of music performance in summative contexts is realized by raising the quality of practice, defined as meeting learning objectives in performance, that conform to the criteria of academic and performance requirements.

**Keywords:** Music assessment, performance assessment, standards.

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**VEO (VIDEO ENHANCED OBSERVATION) AS A TOOL FOR STUDENT TEACHERS’ PROFESSIONAL DEVELOPMENT**

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**Abstract**  
Videos have become increasingly popular artefacts of practice in teacher education and teacher learning. Previous studies have indicated positive effects of video recording on teachers’ and student teachers’ learning and reflection. Despite the interest for using video technology, there has been relatively little research on the effectiveness of various uses of video in teacher professional development. This paper focuses on trialing of a new technology VEO (Video Enhanced Observation) and relating study in one primary school teacher education program in Finland. VEO uses iPad capabilities to enhance the professional development of teachers and student teachers through video observation practice. VEO allows users to time-stamp live video of lessons with tags relating to the activity in the classroom based on a range of pertinent categories and subcategories. The option to rate instances as positive, negative or simply as one that provokes a question can support dialogue around practice in teacher education program. In a small study described in this paper eight student teachers trialed VEO-app during their final teaching practice. Trialing was voluntary for the students and was not connected to practice supervision. The students recorded each other’s lessons and discussed videos together. After the practicum period the
students filled a webropol-questionnaire where they told about their experiences of VEO. The data was analyzed using thematic content analysis. The original purpose of the study was to find out how VEO could support student teachers’ learning and reflective skills. According to the results of trialing the students were suspicious and negative towards a technology. The students did not consider VEO as a tool supporting their professional development. Reasons behind these thoughts were that the students did not understand meaning of VEO trialing for themselves. English language of the application and variety of tags caused problems for the students. VEO trialing gave information about VEO and its possibilities in teaching practice. The results contribute to previous research highlighting that, to be an effective tool for learning use of video has to be well planned including a clear purpose and aim. It seems to be useful to connect technology trialing to students’ guided reflective activities and supervising discussions. Based on the students’ feedback in this study VEO will be modified and applied to Finnish context. This includes translations and making of new tags among others. A new version of VEO will be tried by student teachers in autumn 2016.

Keywords: Student teacher, professional development, reflection, teaching practice.

WHAT DO NEWLY RECRUITS NEED AND WHAT DO WE DO IN INDUCTION? THREE CASES FROM ANADOLU UNIVERSITY SCHOOL OF FOREIGN LANGUAGES

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Abstract
Pre-service training is the primary means by which candidate teachers of English obtain the fundamentals of teaching and get expertise in English language. However, pre-service education can only partially train language teachers for their professions, because every job environment has its own dynamics and inner mechanism, and hence unique in many ways. Therefore, it is essential for institutions to run their own orientation and induction programs where they familiarize the newly recruited teachers about the dynamics of the school, the curriculum, the assessment procedures, institutional teaching philosophy and other details about how the administrative works run at the institution. Anadolu University School of Foreign Languages (AU SFL) has an intensive language programs in English, French and German languages and harmony within and across these three programs is very important for smooth running of the language program. These intensive language programs entail regular teaching duties, as well as other duties, such as student club activities, testing and assessment, technology integration and curriculum design. So, it is really important to inform the newcomers about these major and minor duties, as well as orientating them in the initial stages of their professional lives and professionalism. Orientation and induction programs have always been conducted at AU SFL; however, in the last three years, these induction programs have been planned and carried out meticulously taking into account the immediate needs of the newly recruits. This paper aims to present three individual cases of induction programs with their evaluations from the eyes of the participants, namely, the newly recruits.

Keywords: Induction, novice teachers, professional development, institutional support.

CAREER COUNSELING ACTIVITIES IN SCHOOLS CASE STUDY: ROMANIA, CYPRUS AND LATVIA

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Abstract
The analysis of pupils’ access to career counseling programs in schools was realized within the Erasmus + project „Information and Communication Technology for Romanian Career Counseling” (ICT4RoCc) as a preliminary activity in order to further develop career counseling activities according to pupils’ needs and expectations.
The research sample consisted in 2336 pupils in Romania, Cyprus and Latvia, age 12-20, both genders and residential areas, pupils in public educational institutions, from grade VII to XII.

The results show that around 55% of the pupils in those countries have never participated to career counseling activities and less than 15% of the sample have participated to individual career guidance activities (the percentage in a little higher in Cyprus as a direct consequence of accessing the private career counseling services). Almost 40% of the pupils consider that they don’t have direct access to public career counseling services, irrespective of the country or residential area. Less than 5% of the pupils plan their educational and professional future without the help of a career counselor.

Regarding pupils needs for career counseling, almost half of the pupils mentioned the need for career guidance in order to choose their career (the percentage is also higher in Cyprus); the most mentioned needs are “information” and “advice, suggestion, practical instructions”.

The results demonstrates the need to develop the public career counseling services in all three educational environments and to identify the most effective solutions to include as many pupils as possible in career counseling and guidance activities. Pupils are interested in career counseling and planning their educational and professional future, but public services for career guidance are not as available as they should.

The results in the three countries are similar, but the solutions in the educational and cultural areas are different: in Cyprus, pupils have the economic resources to hire a private career counselor that provides the services that the public sector doesn’t provide; in Latvia, many schools hired a specialist in career counseling, so the number and the quality of those activities increased in the last years; in Romania, one plausible solution is to implement online counseling services and digital resources that could help the school counselors in providing services to all the interested pupils.

*Keywords:* Career counseling, education, professional guidance.

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**CREATING SUSTAINABLE TEACHER EDUCATION LEARNING ENVIRONMENTS: A SOCIAL REALIST APPROACH**

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**Abstract**

The search for quality in teacher education has been the focus of the post-apartheid South Africa. Taking a cue from Gerard Guthrie, I demonstrate how the dominant progressivist agenda to transform teacher education has not fully yielded the promised outcomes even after 22 years of experimentation and re-engineering. Through this analysis I agree with Guthrie that the problem might be with the progressivists’ focus on teaching and not on learner performance, as well as on learner-centered pedagogies at the expense of learning-centeredness and recognising the value of the local modes of learning. Currently teachers are educated almost exclusively in the taken for granted global learner-centeredness as though there are no other ways of learning which are indigenous to the South African experiences, fears and aspirations. To periodise the efforts of the progressivists’ towards this elusive quality enhancement project since 1994, I use Joel Kinchloe’s impression of bricolage as the organising principle to describe the 8 moments which have characterized theorisation, policy changes and research work in this regard. The eight moments constituting bricolage are the; traditional qualitative research, the golden age, blurred genres, crisis of representation, postmodernity, post-experimentalism, methodologically contested representation and the current fractured futures. These, although describing eras in the development of qualitative research, they also seem to be useful epochs in understanding how quality was striven for in teacher education since 1994 South Africa.

This historical analysis is important to show how various attempts were embarked upon with good intentions to improve the quality of teacher education, but with limited success. In contrast to the above, I bring the argument to a halt by suggesting that investing in and valorising local knowledges where instances of civil society are involved in the crafting, implementation, evaluation, assessment and monitoring the development of teacher education, could add more value and improve the levels of success.

*Keywords:* Sustainable learning environments, social realism, bricolage, progressivism, teacher education.
USE OF COMPUTERS IN MATHEMATICS CLASSROOMS: DATA FROM TIMSS 2011

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Abstract
Mathematics teachers are expected to use computers in their mathematics classrooms efficiently to catch the era. The aim of the current study was to investigate the frequencies of mathematics teachers' usage of computers by using TIMSS 2011 data. Seventeen countries out of 45 countries were selected based on their performance in TIMSS 2011 eighth grade mathematics achievement test. The results indicated that all of mathematics teachers included in the study use computers both for preparation and administration work at higher percentages with a few exceptions. As to the using computers in classroom instruction, the results vary for high-performing, average-performing, and low-performing countries. It is not so meaningful to claim that there is a relationship between use of computers in mathematics classrooms and average mathematics achievement in TIMSS 2011. Although some of these countries provide support for their mathematics teachers to use computers in their classrooms, some of them fail to satisfy mathematics teachers' need in providing technical support.

Keywords: Mathematics teacher, mathematics classroom, TIMSS 2011, computer.

CREATING SELF LEARNING, ACCESSIBLE & LOW-COST MINI-VIDEOS

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Abstract
E-learning (CRUETIC,2011; Marketdata Enterprises, 2011) and, in particular, its mixed variety or b-learning (Heinze & Procter, 2004) is one of the most efficient ways to train faculty (García-Cabrera, 2013). In this sense, training courses are time consuming for these professors, whose responsibilities turn out to be a lot in fields like teaching, researching and management. Offering mini video tutorials in these courses allows a more flexible and self-sufficient formation (Letón, Durbán, D’Auria & Lee, 2009), since they combine a sort of learning process which is both face-to-face and practical (Valderrama, Sánchez & Urrejola, 2009). In this sense, mini videos can be considered as Knowledge Pills (Sanchez, Cancela, Maceiras, & Urrejola 2010) (Bengochea Martínez, 2011) because they are e-learning contents designed to provide a briefing, refreshment or training about a specific subject matter within 15 minutes or less. However, the production of mini videos involves a lot of time and complex tools are very often required. Moreover, faculty members do not usually know the theoretical or practical process to elaborate them. This work suggests a systematic process and the use of free tools to make mini videos in a regular way. They should be accessible, multilingual and low cost in terms of both time and money. We propose a flexible and simple process together with the use of Google App tools to make the transcription and translation process can be quicker. Google Apps are accessible in any modern browsers, letting the edition of different kinds of contents by various users who work collaboratively. The final aim of this work is to prepare a guide of good practices to make mini videos for b-learning courses, which should be divided into different parts or workshops aimed to train faculty. In this way, we intend to contribute to their lifelong learning to ease its follow-up from everywhere at any time.

Keywords: Higher Education, lifelong learning, e-learning, knowledge pills, video tutorials.
A FRAMEWORK OF PRACTICE FOR EDUCATING NOVICE STUDENTS TO BECOME PROFESSIONAL COUNSELLORS

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Abstract
The design and delivery of a training programme for counsellors is challenging, because it necessitates considerable enhancement of trainees’ attributes that are key factors for effective counselling. The arising issues are academic, practical and ethical. In this paper, we present a framework developed within a postgraduate programme that ensures high quality academic standards in teaching, learning and assessment and at the same time offers students the opportunity to exercise the acquired skills within a real working environment safely, ethically and effectively for both themselves and their clients. We present the complexities that trainers and trainees encounter during this journey. The proposed approach ensures that the practical experience which trainees acquire, will help them to develop an accurate self-concept that leads towards becoming professional counsellors.

Keywords: Higher education practical experience, counselling training, professional eligibility.

PLACE-BASED PEDAGOGY: A NEW DEVELOPMENT AT THE UNIVERSITY OF HAWAI'I

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Abstract
An international education new development involves the creation of culturally responsive curriculum to engage marginalized learners across the Pacific Islands in academic standards. A multicultural approach to curriculum, instruction, and assessment that focuses on the importance of culture in schooling is understood as culturally responsive pedagogy. The U.S. Department of Education's equity assistance centers, such as the Equity Alliance, helps schools to establish the conditions for equitable educational outcomes for all students, and using cultural responsiveness is one of the measures of the needed capabilities of teachers, principals and school communities as a whole (Equity Alliance, 2015). Cultural integration seemed a socially just and developmentally appropriate qualitative research-based instructional intervention to address the problem of low academic performance and identity crisis for students in Pacific classrooms. Researchers support that culturally-responsive curriculum can make a difference in student achievement by understanding the student’s home-community culture, and integrating these cultural experiences, values, and understandings into the teaching and learning environment (Au, 2007; Banks, 2004; Brown-Jeffy & Cooper, 2011; Gay, 2002; Ladson-Billings, 1995; Maina, 1997; Montgomery, 2001; & Rhodes, 2013). Mandated instruction plus tests and curriculum imported from the mainland are not proving to be effective in Hawai‘i schools (Deering, 2006). Pacific Island students face a dual identity crisis of sorting through blended Pacific and United States cultural and national identities while navigating individual developmental identity formation (Erikson, 1968). Identity formation is especially challenging in a diverse multicultural environment like Hawaii, which is home to a tremendously diverse population, comprised of approximately 20% each of persons of Native Hawaiian, Japanese, Filipino and European/Caucasian ancestry, along with Chinese, Korean, Vietnamese, Samoan, Tongan, Marshallese, Micronesian, African American, Native American, Latin American and other Asian and Pacific Islander ethnic/racial groups. Examples of multicultural curriculum and place-based lesson plans that have been created and facilitated in Hawaii will be presented. Graduate level case studies of teacher candidates utilizing culturally-responsive pedagogy as their action research instructional
interventions revealed the following types of emergent themes: a) students’ engagement increased, b) cooperative learning increased, c) parent/community involvement increased, d) the quality of student work increased, and e) student and teacher understanding of cultural identity deepened.

**Keywords:** Culturally-responsive, indigenous, place-based, pedagogy, teacher development.

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**BUILDING A THREE DIMENSIONAL UNIVERSE FROM THE CLASSROOM: MULTIPERSPECTIVE VISUALIZATION FOR NON-SCIENCE UNDERGRADUATES**

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**Abstract**

We develop three-dimensional mental models of our physical environs from two dimensional imagery we collect with our eyes. This is possible only because we move through that environment, viewing it from multiple perspectives, and construct a model consistent with a collection of two-dimensional views. The technique works well for structures whose sizes are comparable to the magnitude of our movements, such as rooms, buildings, and even cities; but for much larger structures, we are effectively limited to a single perspective, and therefore must create mental models from indirect measures. The astronomical realm is almost always in this latter category, and student understanding of the structure of the universe is limited by their inability to use multi-perspective techniques to generate an accurate mental image of astronomical structure. Without an accurate model, students tend to underestimate the distances to and between astronomical objects, leading to inaccurate assumptions regarding the overall size of the universe, the interactions between celestial objects, and our location within and among these structures.

To improve student understanding of the size, scale, and structure of our universe, we have developed hybrid laboratory activities based on a mix of hands-on discovery with physical models and multi-perspective visualization using the WorldWide Telescope (WWT) virtual environment. WWT, developed by Microsoft Research, managed and supported by the American Astronomical Society, and freely available to the world community, represents real astronomical data in a three-dimensional environment that students can investigate from a variety of physical perspectives. They can virtually “fly through” astronomical structures and thus use the same techniques they use in their local everyday environment to develop an accurate mental model on an astronomical scale.

These new lab activities connect indirect measurements of distance and structure (based on real astronomical data) to visualizations of those same structures, so that students understand the techniques by which structure is measured, and create accurate mental models of those structures. This not only improves their understanding of their astronomical environs, but also improves their understanding of the physical processes that occur in our universe.

We will present examples of these activities, and assessment data measuring the improvement in student understanding of astronomical size, scale, and structure, as a result of their interactions with these materials.

**Keywords:** Undergraduate science education, STEM, visualization, laboratory activities.

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**A CRITICAL POSTCOLONIAL DISCOURSE: A CASE FOR SUSTAINABLE LEARNING ENVIRONMENT IN SOUTH AFRICA**

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**Abstract**

This scholarly piece propose to offer a lucid prose on discourses around postcoloniality, teaching-learning in Higher Education institutions in South Africa. The paper gives a solid theoretical standing from related literature that proposes finest educational practices that could restore equity, social justice, democracy, respect and hope. The aim is to position Sustainable Learning Environments (SuLE)
which pronounces fluently matters of curriculum; teaching - learning; and governance as a possible elucidation towards educational contests in South Africa. In this scholarly piece neocolonial and postcolonial discourses will be understood as a multifaceted interfaces arising from the socio-cultural and socio-economic dynamics. The objective of this scholarly work is not to return to the past, but to reposition ourselves as Africans and renegotiate our paths to greater heights in new education developments. This intellectual piece understand SuLE as a vehicle that could assist is disrupting the neocolonial and neoliberal discourses and give us new gaze into the future to be able to answer educational challenges and new developments.

**Keywords:** Sustainable learning environments, Postcolonialism, social justice, teaching and learning, higher education.

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DEVELOPING POSTGRADUATE MATHEMATICS TEACHER KNOWLEDGE FOR TEACHING: A META-EPISTEMOLOGICAL PERSPECTIVE OF TEACHER KNOWLEDGE

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**Abstract**

This paper describes theoretically how to develop a postgraduate mathematics knowledge for teaching from a meta-epistemological perspective of knowledge needed for teaching mathematics. The historical development of teacher knowledge captures a search for a kind of knowledge needed to best create spaces for learning to take place. However, the challenges of teaching and therefore learning are imbedded within cornucopia of both epistemological and social variables. Thus, these multiplicity of variables within different spaces of learning makes it difficult to unravel the multi-layers of both the challenges of learning and developing pedagogies needed for teaching within such complex context. In an attempt to operationalize the aim of this study, I trace the historical development of teacher knowledge for teaching since 1986. In order to make sense of this complex knowledge needed for teaching, I used the analytical lens of meta-epistemology as theoretical bases to describe different types of knowledge from empirical, experiential, normative, critical, ontological, and reflective-synthetic domains as coined by Kencheloe. Guided by the preceding knowledge domains, I demonstrated how critical complex epistemology could be developed in postgraduate mathematics teacher education. Furthermore, using meta-epistemology knowledge domains I challenged the dominant discourses that conceptualize knowledge for teaching mathematics as set of skills for teaching general laws and rules. Through this lens I further argued that the knowledge for teaching is grounded in a critical complex epistemology.

**Keywords:** Teacher knowledge, meta-epistemology.

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HOMOSEXUALITY AND HOMOPHOBIA IN SCHOOL  
AN EXPLORATIVE SURVEY ON THE ITALIAN PRE-SERVICE AND IN-SERVICE TEACHERS' PERCEPTIONS

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**Abstract**

In the school context, homophobic behaviors and attitudes are expressed more easily (Kosciw and Diaz, 2006), while the homosexuality is still a taboo and a controversial issue (Fiorucci, 2014). In the Italian schools, sexual identity and fighting homophobia are an "unjustified absence" (Batini, 2011; 2014). Scientific literature (Batini and Santoni, 2009; Lasser and Tharinger, 2003) shows that teachers’ preparation is completely inadequate (Batini, 2014) and that the most common attitude is still the heteronormativity: denial and de-legitimization of non-heterosexual behaviors. The paper presents a qualitative research conducted between 2013 and 2015 and aimed to explore and to describe Italian pre-service e in-service teachers’ perceptions about homosexuality and homophobia.
The study shows that the issue of homosexuality and the contrast of homophobia in Italian schools is still absent: the most common attitude is that of the “don’t ask, don’t tell”. In addition, the teachers’ perceptions show to big knowledge gap and their total unpreparedness and inexperience about this theme.

Keywords: Homosexuality, homophobia, school, Italian teachers.

THE IMPACT OF STRESS AND COPING STYLE ON EDUCATIONAL INVOLVEMENT AMONG MOTHERS OF CHILDREN WITH SPECIAL NEEDS INTEGRATED IN REGULAR EDUCATION

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Abstract
The purpose of this study was to examine the effects of stress and coping style with stress among mothers of children with special needs on their involvement in the school. The findings indicate that emotional coping style predicts a high level of stress among all mothers. Comparing mothers of children with special needs with mothers of normally-developing children, higher levels of stress were found among mothers to children with special needs. However, this difference was not reflected in the involvement at the school which did not differ between the two groups. Moreover, it was found that mothers of children with special needs make more use of social support coping style. The findings contribute to the investigation of predictive factors of parental stress and parental involvement in their children's education.

Keywords: Education, children with special needs, mothers, stress, coping style, involvement.

A CASE STUDY: TEACHERS’ CONCEPTUALIZATIONS ABOUT PROFESSIONAL DEVELOPMENT

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Abstract
This study aimed to investigate the two primary school teachers’ conceptions of professional development, their perceptions of self-improvement and the factors influencing their professional development. In this investigation, a case study approach was adopted. The participant teachers were given a semi-structured interview and the data collected was qualitatively analyzed. After individual case analysis, cross-case analysis was carried out to compare the participants’ conceptions of professional development, their perceptions of self-improvement and the factors influencing their professional development. The findings of the study revealed that the two teachers viewed professional development as an individual process rather than collaborative. They perceived their professional development locally practiced and self-renewed, gained with the help of self critical reflection. They also emphasized that the in-service training courses offered to them by the Ministry of Education do not respond to their needs. Thus, they cannot get the maximum benefit from them. The findings of this study has a significant contribution in drawing a clearer picture of the professional development endeavours the teachers get engaged into and the nature of the professional development in Northern Cyprus context.

Keywords: Collaborative environment, reflective practice, professional development, work context.
THE IMPACT OF INTELLECTUAL CREATIVITY SKILLS ON MATHEMATICS

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Abstract
The aim of the research is to identify the methods used by mathematics teachers for the formation and development of creative, analytical and probabilistic thinking skills of students by taking both student and teacher views. In this context, it has been conducted in order to reveal the environments prepared, the methods applied and the assessment made by the teachers. Research was conducted in 2015-2016 at two public schools (colleges) which students can enrol after passing entrance examinations. The study group of the research consists of 8 mathematics teachers and 8 college students randomly chosen from the public schools. Eight teachers and eight students determined by the convenience sampling method form the sample of the research. Interviews was preferred data were collected by semi-structured interview forms containing open-ended questions. In line with the results obtained from the research, it has been observed that the collected data support the views of teachers and students.

Keywords: Creative or (intellectual creativity) thinking, analytic thinking, connective thinking ability, mathematics.

THE IMPACT OF TEACHING IDENTITY ON CLASSROOM MANAGEMENT SKILLS: RESIDUAL PROCESS OF CLASSROOM MANAGEMENT

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Abstract
This qualitative study aims to create a new criteria to help teachers being prepared to become more experienced practitioners. It also aims to find out the impact of their teaching identity on their classroom management skills. Multiple variables influence an individual teacher’s behaviors and attitudes. These overlapping categories of identity include, but are not limited to, characteristics such as gender, region of origin, religion, and level of ability. Teaching identity, on the other hand, is a lifelong learning process which includes an individual teacher’s character, learning and thinking skills, teaching strategy, methodology, experienced that is gained in time and so on. We need to be careful, of course, that generalizations about teachers’ behavior or teaching identity do not substitute one set of assumptions for another. For this study, first teachers are required to keep a weekly journal in which they reflected their teaching identity. Using the new criteria (named residual process of classroom management) data were collected from a university with teachers who teach English as a foreign language. Empirical results from the study demonstrate that the participants realised the benefits of being consciously reflective; both for their own teaching identity and classroom management skills. This outcome highlights the impact of revealing teaching identities on classroom management skills.

Keywords: Teaching identity, classroom management, residual process.
HOW IS THE STUDENTS’ PERCEPTION OF THEIR ASSESSMENT IN HIGHER EDUCATION?

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Abstract
This study focuses on analyzing the current situation of student assessment practices and on students’ experiences in relation to assessment of the learning process at university. The context of this study corresponds to the assessment of skills acquired by university undergraduates of different degrees at the University of the Basque Country (Spain), and aims to reflect upon the assessment practices currently used.

Methodologically the study is based on survey methods, by applying a student questionnaire, which is used to compile information about how they perceive the assessment process in subjects they are studying, and their viewpoints and attitudes towards this assessment.

The questionnaire consists of 55 Likert type items with 5 options arranged into 3 blocks (viewpoints, attitudes and experiences).

A stratified sampling was carried out of the five main areas of university teaching, ensuring the proportionality of students from each area. There were a total of 1012 students in the sample.

The analysis itself was carried out by descriptive and multivariate techniques.

Some conclusions:
• For university students, the essence of the assessment process lies in the verification and evaluation of learning.
• The object of the assessment is essentially the acquisition of theoretical knowledge, and less importance is given to the skills, abilities or attitudes developed by the students.
• The assessment is mainly based on the assignment of grades for written exams, which generally take place at the end of the teaching-learning process.

Keywords: Higher Education, European Higher Education Area, Survey methods, Likert type scale, Learning-orientated assessment.

EVALUATION OF PEDAGOGUES JOB SATISFACTION USING THE QUESTIONNAIRE JOB SATISFACTION SURVEY

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Abstract
Currently there is a trend to monitor the satisfaction of stakeholders in many types of organizations, including schools and other organizations employing pedagogues. This trend is based on the philosophy of TQM (total quality management) and considers the satisfaction of all stakeholders as a fundamental aspect of quality. Many researches are focused on evaluating the work of pedagogues (form the view of their managers, inspectors, but also from the view of students, parents, clients). However, we should also monitor the situation from the other side, from the perspective of pedagogues and their job satisfaction.

The study focuses on the Czech version of the Job Satisfaction Survey questionnaire (P. E. Spector). The questionnaire has 36 scale items divided into 9 factors (Pay and remuneration; Promotion opportunities; Immediate supervisor; Monetary and nonmonetary fringe benefits; Appreciation, recognition and rewards for good work; Operating policies and procedures; People you work with; Job tasks themselves; Communication within the organization). It seems to be generally applicable in any
organization. The main aim of this research is to test this tool in the environment of schools and social services which employ pedagogues, validate it in terms of construct validity and estimate its reliability. The intention is to discuss its usability in Czech educational environment. The secondary objective is to present selected results of the investigation, which can be obtained with this tool.

**Keywords:** evaluation, pedagogue, job satisfaction, questionnaire

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**TRAINERS AS KEY ACTORS IN SENSITIZATION SESSIONS TOWARD TRANSFORMATIVE ACTIVITIES**

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**Abstract**

The worldwide rise in obesity makes it the first non-infectious epidemic in human history (Froguel et al., 2000). This rapid increase is influenced more by environment than by biology (Hill et al., 2003). In an effort to halt the trend, Quebec has launched a major awareness-raising campaign that focuses on healthy environments and targets stakeholders in schools, municipalities, communities and health sectors. The purpose of the study, then, was to determine how this campaign can promote action towards building and fostering healthy environments. The theoretical framework is based on planned change (Hall, 1973; in Savoie-Zajc, 1993). Objectives were to 1) identify key roles played by trainers in the sensitization session process; 2) describe and evaluate animation methods used by trainers, and 3) examine the impacts of the sessions. A qualitative approach research was prioritized, consisting in two focus groups conducted with 17 trainers. Findings revealed that, as an agent of change, the trainer plays a key role in implementing the sensitization sessions and this role was expanded to many other ones during the national sensitization process. A multi-method approach during sensitization sessions expanded networking, provided a common frame of reference and a transversal viewpoint, and drove coherent actions for stakeholders involved. The trainers managed to offer conditions which encouraged the transition from awareness to information, thereby generating significant results in terms of action. A sensitization session is thus a prerequisite for training transformation activities aimed at innovation. These results can be related to other contexts, especially educational activities.

**Keywords:** Trainers, sensitization sessions, educational activities, healthy environments.

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**STUDENT EVALUATION OF THE QUALITY OF UNIVERSITY EDUCATION WITH THE USE OF SEMANTIC DIFFERENTIAL**

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**Abstract**

The staff of universities in the Czech Republic have an obligation to regularly monitor the quality of education they provide to students. Different scale questionnaires are most often used for these purposes. However, the questionnaires do not allow to detect hidden inner meanings that students subjectively attach to rated aspects of university education. In the context of pedagogical evaluation we consider it appropriate to apply various techniques that contribute to triangulate our findings. For this reason, we have decided to apply semantic differential in the evaluation of quality at our university department. We have applied the tool ATER (Attitudes towards Educational Reality by M. Chráska), which has been validated and proved its permanent reliability in the Czech educational environment. This tool allows us to assess selected constructs in terms of two factors, namely Factor of assessment and Factor of energy.
With its use, we are able to determine how students perceive selected conceptual indicators in terms of positivity - negativity, and also in terms of simplicity - difficulty. The aim of this study is to highlight the possibilities of semantic differential in the area of student evaluation of the quality of university education. Semantic differential seems an appropriate evaluation method. With its use, we are able to capture another dimensions of quality in comparison with a questionnaire.

**Keywords:** Evaluation, education, student, semantic differential.

COGNITIVE DIAGNOSTIC ASSESSMENT USING THE TRAPEZOID TO EVALUATE 5TH GRADE STUDENTS IN TAIWAN

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**Abstract**
Traditional test designs do not properly reveal a student’s mastery of skills. Thus, many test results help neither students nor teachers gain a better understanding of the meaning represented by scores to make learning more efficient. This study used a trapezoid as test content. The dimensions of the framework included the Van Hiele theory and mathematical content as the vertical axes. The horizontal axes had three levels: concept comprehension, procedure execution and reasoning. The test items’ designs were reviewed by mathematics teachers and experts based on the framework, and the test was administered to 811 students in the 5th grade at 11 schools in Taiwan. The study analysed the response data of students via the CTT, IRT, OT and DINA models of cognitive diagnostic assessment to investigate the test items’ analyses, assess students’ ability estimation and knowledge framework and determine error patterns.

**Keywords:** Trapezoid, CDA, DINA, Q matrix, OT.
PROJECTS AND TRENDS

INTERDISCIPLINARY PROJECTS IMPLEMENTED IN THE ENTREPRENEURIAL SCHOOL: A NEW TREND IN TEACHING

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Abstract
The new ministerial guidelines for education in Quebec involve, among others, diversification or even a redefinition of educational approaches that focus on the opening up of disciplines and interdisciplinary activities (MEQ, 2006). This interdisciplinary educational trend allows for the exploration of academic knowledge and promotes reinvestment in current and concrete practices (Hasni et al., 2008; LeDoux, 2003). Currently there is an entrepreneurial spirit amongst young people in Quebec. However it appears that school-based entrepreneurship is mainly supported within an advantaged context. There is very little documented research that supports interdisciplinary projects for improving academic success and perseverance in this advantaged entrepreneurial context (Pépin, 2011). The school staff is also recognized as key actors. This research uses a qualitative case study methodology where the main objective is to describe the implementation process of interdisciplinary projects in the school-based entrepreneurial context. Rogers’ (2003) and Proulx’s (2004) research works serve as theoretical foundations. Two main instruments are employed to collect data from school staff, a focus group (n =6) and individual interviews (n=8). Preliminary results indicate that the majority of interdisciplinary projects include more than two disciplines and a formative assessment for the students. Teacher motivation and commitment is obvious, but little collaboration between them is observed. This study proposes to develop a structured approach for interdisciplinary projects within the school-based entrepreneurial context to include collaboration among the school staff, as well as to ensure the sustainability of these projects.

Keywords: Interdisciplinary projects, entrepreneurial school, perception of school staff, qualitative methodology, case study.

DEVELOPMENT AND PRELIMINARY RESULTS OF THE MULTICULTURAL AWARENESS SKILLS AND KNOWLEDGE SURVEY

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Abstract
Based on data from the National Center for Education Statistics in the United States, the public school student population is becoming more diverse (2011). As a result of this, teachers need to be culturally competent so they can meet the unique needs of the diverse student body they will be teaching. This quantitative study offers an examination into the creation of an instrument, the Multicultural Awareness, Skills, and Knowledge Survey (MASKS), used to measure the cultural competency of pre-service teachers, as well as a preliminary analysis of the data findings. This poster presentation provides a comparison of four cultural competency survey instruments used to design the MASK, the steps used to create the survey, and results of the pilot and a final field test of the instrument. The study yielded 446 usable responses. Exploratory factor analysis was used to narrow the number of survey items and determine internal validity, whereas Chronbach’s alpha was used to determine reliability. The outcome of this study was a valid and reliable survey instrument which can be used to measure the cultural competency of pre-service teachers.

Keywords: Teacher education, multicultural, diversity, cultural competency.
PEDAGOGICAL PARADIGM SHIFT IN HISTORY TEACHING AND TEACHER TRAINING IN HUNGARY

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Abstract
The principal aim of the presentation is to show the general characteristics of the new pedagogical culture of the 21st century, the changed methods of teaching and learning with particular focus on history teaching. In the first part of the presentation the characteristics of the new pedagogical thinking and practice will be introduced, which will be followed by the trends in teacher training in international practice and in Hungary. After having listed the most important issues and questions of the topic, the presentation outlines the new expectations of history teaching and history teachers in international and Hungarian practices. The section is followed by a short review on the main trends in history teacher training both in international and Hungarian practices, also referring to how much present teacher training in Hungary meets the new expectations. Finally, a list of trends, long- and short-term tasks of the issue is given.

Keywords: History, teaching, teacher training, methodology, pedagogy.

RESULTS OF PRACTICE ORIENTATED PROJECT WORK IN INTERDISCIPLINARY TERM-OVERLAPPING STRUCTURES

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Abstract
At the HTW Berlin (a University of Applied Science) we offer our students a new kind of elective courses starting a few semesters ago. This involves two consecutive courses; both arose within the context of natural science and of technology problems. These courses are open to all students in all terms. The students work in small interdisciplinary and term-overlapping project teams (2 to 6 students) and realize a project idea of their own. The practical results are widely spread. This work presents a selection of these results. Some practical results are very impressive considering to the scheduled workload for the course (100 hours) and the very small budget (50€) for the students (using own funds or fundraising are allowed). Another idea of the Project Laboratory courses is that the students should present their projects to the public.

Keywords: Practice-orientated project work, interdisciplinary term-overlapping structures, multiple benefits.

THE EFFECT OF PROBLEM BASED LEARNING ON ORAL COMMUNICATION COMPETENCY FOR AN UNDERGRADUATE KINESIOLOGY COURSE

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Abstract
Purpose: The aim of this study was to ascertain the effect of Problem Based Learning (PBL) on student oral communication competency gains and to determine how student goal orientation influenced this skill acquisition.

Methods: Eighty students from two consecutive undergraduate Kinesiology courses (Spring 2014 & 2015) formed into 29 small groups and were studied. Oral communication competency was assessed using a customized rubric and digital recordings of student presentations. Individual student goal
orientation for their PBL learning activity was quantified via a ranking survey and then aggregated for each group. Changes to oral communication competency across time were tested using a dependent t-test; a linear regression equation assessed the relationship between oral communication change score and aggregated group goal orientation; \( \alpha < .05 \).

Results: Significant inter-rater agreement was found at both time points for oral communication rating, and student groups demonstrated significant oral communication gains across time. However, aggregated rankings of student goal orientation did not predict these gains.

Conclusions: Collaborative learning was shown to improve students’ oral communication competency. Future study is required to determine the influence of student motivation and goal orientation, in relation to the various phases of knowledge creation occurring within student groups, on oral communication competency.

**Keywords:** Cooperative groups, communication skills.
THE PRACTICAL TRAINING OF STUDENT TEACHERS THROUGH UNIVERSITY NURSERY SCHOOL

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Abstract
For the realization of the practical part of the nursery teachers training Faculty of Humanities of Tomas Bata University (TBU) in Zlín uses its own University Nursery School (UNS). UNS is used in priority by the staff of the University which is its founder. At UNS there is realized longitudinal research study which will result in a case study about this institution. Within the set research strategy we do survey, interview the staff of UNS, parents, students and the representatives of the founder and also do observation and analysis of the content of the students’ written reflection from their practical training at UNS. The aim of the research study with the students has revealed how they reflect the conditions for the development of their professional skills and which of the characteristics of UNS they consider specific in relation to acquire relevant experience for their future profession. The result of this analysis contains three basic conclusions. Students perceive a tight binding of UNS to the University that establishes it and participates in its specialized supervision. They also evaluate the specificity of parents who are in the most cases academics and students of the TBU what significantly determines the cooperation with them. At last but not least they expressed strong belief in the fact that the age group of children (around two years old) is similarly specific since pre-school education at nursery schools in the Czech Republic is primary for children from the age of three to six. All of these characteristics of UNS put increased demands on the preparation, organization of work and teaching at UNS.

Keywords: Research, student, parents, university, practical training.
TEACHERS AND STUDENTS

LANGUAGE DEVELOPMENT OF INTERNATIONALLY ADOPTED CHILDREN

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Abstract
The present paper discusses issues of student diversity, focusing on the language development of Internationally Adopted Children (IAC). The adoption of foreign children constitutes an international social phenomenon of high frequency, due to demographic, sociopolitical and humanitarian reasons. The sociolinguistic shortcomings and traumatic experiences of IAC have been assumed to pose risks of developmental delay on their interpersonal relationships, emotions and particularly on their linguistic skills, affecting respectively their in-school and extracurricular life. Consequently, the purpose of the subject paper is to outline the linguistic development of IAC. For this reason, a literature review strategy is followed, collating and summarizing the findings of the twenty (20) most recent (2000-2015) relevant empirical studies, conducted at European and international level, investigating internationally adopted preschoolers, primary school aged children and adolescents. In all three categories, the IAC’s language development seems peculiar; however, it is observed that it does not differ regarding certain stages applicable in typically developing monolingual children, acquiring relatively quickly the current second first language (English or French), although considered a vulnerable social group. Nevertheless, specific language deficits of receptive and productive language delay are identified, by majority in oral speech, which fall outside the sphere of pathology; they depend on IAC’s small age at adoption, as well as on their linguistic and adverse psychological and emotional background, in conjunction with the multiple idiosyncratic effects of the school and family environment. In conclusion, until preschool age, by majority indigenous children’s language level is reached or approached by IAC. Lastly, owing to the ambiguous and sometimes conflicting findings and methodological limitations of the studies reviewed, further investigation of the sociopolitical, demographic and economic parameters of IAC’s language acquisition is expected, in order to benefit both theoretically and on the level of educational practice.

Keywords: Language development, internationally adopted children.

MANAGEMENT OF BEHAVIOR PROBLEMS OF STUDENTS WITH DISABILITIES: GREEK TEACHERS’ OPINIONS

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Abstract
Effective classroom management is necessary for all teachers and facilitators. Not only does classroom management include how the teacher or facilitator delivers the curriculum, but also how the students interact with the teacher and with peers in the classroom, and extends into the classroom environment in which students learn as well as socialize. Approaches aimed at improving school and classroom environments, including reducing the negative effects of disruptive or distracting behaviors, can enhance the chances that effective teaching and learning will occur, both for the students exhibiting problem behaviors and for their classmates. Special and general educators believe that there is a positive correlation between emotional intelligence growth and school performance, but they do not seem to be aware of the control they themselves have on the teaching structure and its effect on the students (e.g. Giavrimis & Papanis, 2009).

The purpose of this survey was to determine teachers’ perceptions of their confidence in classroom behaviour management, as well as the use and usefulness of such strategies. Teacher Classroom Management Questionnaire (TSEQ: Webster-Stratton, 2012) was used as an instrument in the particular study. In total, 200 special (98) and general (102) educators from primary and secondary schools have participated in this survey. The sample was randomly selected from cities in Central and North Greece.
The results show that, in general, teachers state ‘somehow confident’ in managing present and future behavior problems in class and also in promoting social and emotional skills’ growth. Only 30% of the teachers questioned, though, have applied a social and emotional learning program in their class. They state that they often use prevention strategies, such as discipline plan, clear rules etc because they consider them important. Concerning positive or negative behavior management strategies, they seem to prefer using them almost to the same extent, because they consider them almost equally important and necessary for the classroom management, except for the inappropriate strategies such as singling out child or group for misbehavior. Finally, they seek support and solutions mostly among their peers rather than the relevant literature. Despite their confidence in using appropriate strategies, regular training in classroom management would improve their choice of behaviour management techniques (Giallo & Little, 2003).

**Keywords**: Behaviour management strategies, teachers’ opinions, students with behavioural problems.

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**IMPROVING TEACHING SKILLS OF THE FACILITATORS IN CLINICAL SIMULATION**

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**Abstract**

The teaching and facilitation skills have not been sufficiently covered in the clinical simulation, and it has been granted more attention to the clinical domain, sometimes losing the richness of the reflective guided process. For this reason, since 2015-2016, the University of Manresa (Spain) launched a specific postgraduate training in clinical simulation, adding a strong component of educational innovation in simulation processes. This has resulted in: a) an improvement of simulation as a learning and professional improvement methodology; b) an effort to contemplate strategies, skills and attitudes of teaching and facilitation.

**Keywords**: Simulation, training, facilitator, teaching innovation.

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**TQM TRAINING NEEDS OF UNIVERSITY GRADUATES**

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**Abstract**

The need to adapt Spanish universities to the new European Higher Education Area and the commitment made by higher education institutions to improve the quality of university education has involved competency based learning activities aimed at developing the skills of graduates. College graduates are required to face a large number of demands and requirements during their transition to the labor market. Therefore, not only is it necessary for graduates to have developed the right skills to do the job, they must also keep their skills up to date to meet the constantly changing requirements and needs in organizations. This paper aims to answer two fundamental questions: do engineering graduates need to have acquired competence in TQM to perform their job successfully?, and, what is the profile of the jobs which require the most TQM training and knowledge?

**Keywords**: Total quality management, training and skills, graduates.
PROJECTS AND TRENDS

MATHEMATICS CREATIVITY AND TECHNOLOGY (GEOGEBRA) IN TEACHING AND LEARNING: A CASE STUDY OF 9TH GRADE

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Abstract
Recent studies have shown the advantages of using dynamic geometry contexts in the mathematics’ classroom, in learning of mathematics. More studies like have shown that mathematics students’ creativity can be promoted through new teaching methodologies that means implementing tasks, where the students has a more active and independent role. In general, the students they have difficulties in the learning of mathematics and difficulties of teachers to motivate them to learning. The contexts using technology to facilitate the learning of mathematical concepts and promoting to creativity in students. The attempt to minimize this problem related was the motivation that led to this investigation. This study addressed whether a teaching experience performed with dynamic geometry software (Geogebra), which analyzed the conceptions of students about the creativity concept and evaluated the mathematics creativity by dimensions in reasoning processes of these students, to solve tasks of exploration and investigation in theme Functions. The study sample was one class of 19 students (12-15 years old) the 9th grade of a public school in the northern region of Portugal. The methodology used in this study was qualitative, following a design case study and the instrument for data collection was the questionnaire survey and mathematics tasks, implemented in mathematics’ class at the beginning and end of teaching experience, in the school year 2014/2015. In the data processing it was included the analysis of the responses of students in the questionnaire survey and in tasks, using content analysis by formulating categories of analysis. Analyzing the results, it can be concluded that participants associating creativity and mathematics creativity concepts the “To create do something new and different”. This teaching experience showed that the fluency and flexibility were the dimensions of the most representative mathematical creativity by varying in student’s responses the different questions of the task. To point out that this teaching experience contributed to the development of mathematical creativity of study when students use technology in solving mathematical tasks.

Keywords: Creativity, mathematics, teaching and learning, dynamic geometry software.

BIOMIMICRY: AN EMERGING ECO-ETHIC FOR NEW DEVELOPMENTS IN EDUCATION

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Director General at Global Education Magazine (Spain/ Brazil)

Abstract
The nature of this paper is to study and reflect upon the “Global Citizenship Education” (GCED) and the “Sustainable Development Goals” (SDGs) proposed in the post-2015 Development Agenda led by the United Nations. The work has a transdisciplinary methodology and biomimetic approach with the intentionality to strengthen the links between human education and sustainability in the planet Earth. The concept of biomimicry seeks to understand the operating principles of life in nature with the goal to mimic them and reformulate the current human production systems in a sustainable way with the biosphere. Biomimicry is a key topic in the natural and social sciences because it promotes problem-resolution, cross-disciplinary team-performance, and wellbeing. The study is focused in the
panoramic picture provided by the Big History discipline, in order to understand the ecosystems’ principles of coevolution on Earth. As result, the study shows many sustainable principles that human systems must mimic to achieve the SDGs. In conclusion, it is a research that seeks to integrate the eco-ethics as a pedagogical practice in the implementation of the GCED.

**Keywords:** Sustainable development goals, sustainability, biomimicry, Big History, co-evolution.

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**IMPACT OF BOLOGNA: EXPLORATION OF PRACTICE PROVISION OF HIGHER EDUCATION TO ADULTS WITHIN AND OUTSIDE EUROPE**

**Dr. Ekaterina Kozina**  
*School of Education, Trinity College, University of Dublin (Ireland)*

**Abstract**

This paper discusses the impact of international and European reforms of Higher Education (HE) systems – especially the Bologna Process – on higher education provision for adults within Europe and; in the Russian Federation. Over the past decade the European Commission has encouraged Member States to make lifelong learning the basic principle underlying education and training, and within this framework to develop the Adult Learning sector (as set out in the “Action Plan on Adult Learning”, 2007). Opening up higher education to those who have not previously engaged in studies at this level, including adults, is seen as crucial in this context. Flexible provision has been identified as one of the main elements needed in order to attract more non-traditional learners into higher education while overcoming barriers faced by this group of learners. In spite of this, progress on the benchmark for adult learning participation has been low. The paper presents some findings from one of the strands of the large scale completed project “Opening Higher Education to Adults”, covering a representative range of the 25 countries (20 European and 5 non-European). At the time of author’s work at Higher Education Research Centre, the work was completed on 3 country studies on the adult higher education provision – UK Ireland and one non-European country (Russia) within this international collaborative project.

The overall objective of this work was to collect information contributing to a knowledge base which will inform a number of future activities within the framework of European Cooperation on Adult Learning Policy. In this paper specifically, present the findings on Russia as a country case - mapping and analysis of recent developments in Russia with regard to quality approaches in the field of Adult Learning. I report on the work which involved a mix of desk-based research and analysis, as well as fieldwork, few expert interviews and fact-finding visits: a mapping of national regional policies, frameworks/legislation with regard to quality approaches, innovative teaching methods and other developments in the field of Adult Learning. I will also discuss some of the issues and challenges which are specific to the adult learning sector in relation to assuring quality of its providers and provision.

**Methodology:** The project was a comprehensive study on the factors impacting on the participation of adults in higher education and on the flexible delivery of higher education programmes and learning provisions for adult learners. The Research methodology has specifically focused on 25 country studies. The broad themes of the individual country studies included conducting the background research on the: definitions of ‘adults’ in HE and specification of target group of adult learners in HE; regulatory issues and policies at national, regional and institutional level (e.g. access and admission to HE, funding of HEIs, student grants/loans); the barriers for opening HE to adults (historical and contextual); the drivers for the enhancement of adult learners in HE (e.g. labour market policy, educational policy, demographic change). The work also involved a mix of desk-based research and analysis, as well as fieldwork, few expert interviews and fact-finding visits.

In this paper I present the findings of the research work and conclude with the outcomes of the project and map the important factors that facilitate or inhibit participation of adults in Higher Education. In particular, I will map the important factors that facilitate or inhibit the participation of adults in HE; will describes models from higher education institutions (HEIs) in Russia, based on the completed case study, that are engaged in adult education; identify the types of flexible learning, including open and distance learning which are conducive for good adult learner performance and; will provide an example of good practice, selected from 5 non-European countries, with a specific reference to Russia.

**Keywords:** Mature students, Bologna process, adult learning, access to HE; innovative learning methods.
DRIVING TEACHING INTERVENTIONS WITH ANALYTICS

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Abstract
The research described in this article aims to study the analytics impact on the process of teaching. A short review of analytics evolution is presented, making a retrospect to the time of Greek philosopher Aristotle and his works on Analytics. Some physical analytics methods through the years are mentioned before reaching the contemporary digital world where the modern Learning Analytics concepts, methods and tools are discussed. The paper goes deep into using the information technology achievements in measuring, collecting, analyzing and reporting of data about learners during the educational process. Key methods and popular computer tools for digital analysis and Educational Data Mining are threshed out. Software functionalities are compared and the most sought-after features for a LA product are defined. Finally the paper includes some challenges and further works for creating effective Learning Analytics tools and components integrated in a learning environment.

Keywords: Learning Analytics, Information Technologies, review, Big Data, education.

DOES GERMAN-ONLY SCHOOLING HELP IMMIGRANTS SUCCEED?

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Abstract
This study investigates such policies and tries to show that officially forcing somebody to always use a language different to one’s mother tongue – as well-meant this intention may be – is doomed to fail. Austrian laws do not take a clear position yet. Nevertheless, some illegality of such an intention can be derived from a number of regulations. The study shows that these procedures can unfold massive negative consequences for children that are affected by such policies. They may not only develop minority complexes due to their foreign decent but also experience a feeling of worthlessness and humiliation. Some may even refuse to keep using their mother tongue as a means of communication and in this way estrange themselves from their families and their native culture. This in turn can have devastating effects on their personal development and formation of identity. Another important point is that the acquisition of a second language can only be successful on the basis of a good command of one’s native language. Therefore “German only” policies in schools are contra-productive for the respective individual and society in general. On the contrary, it is indispensable to support and promote mother tongue education for migrant students in schools. Otherwise they will not only suffer from negative personal consequences but eventually develop resistance and resentments against society in general. This again will endanger the cohesion and solidarity of a multicultural state and promote parallel societies.

Keywords: Migration, language policy, multicultural society.

DIGITAL LITERACY FOR THE EMERGING EDUCATIONAL RESOURCES IN THE CONTEXT OF LIFELONG LEARNING

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Abstract
Digital technologies occupy an increasing part of our private and public life. It would seem that educational performances may be improved thanks to digital tools. Implicitly, in a context of lifelong learning, the appropriation of digital skills is a long-standing debate. In this article, we formulated the hypothesis that digital literacy becomes a key element for lifelong learning and completes the traditional
methods of teaching. In order to test this hypothesis, we used a mixed methodology. The results of the research confirmed that, simultaneously, digital literacy is linked with the core competencies, involves a set of educational disciplines and influences the lifelong learning by developing several elements such as creativity, distributed cognition, judgement, pooling knowledge, social awareness and citizenship.

**Keywords:** Digital literacy, digital skills, core competencies, lifelong learning.

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**BEING AN INNOVATIVE TEACHER: IS IT POSSIBLE IN THE SECONDARY SCHOOL EDUCATION?**

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**Abstract**

The University Master’s Degree for Secondary Education, Vocational Training and Language Teaching at the University Jaume I (Castellón, Spain) allows students to consider what education is during the educational period involved. It is open to students from various degree courses, many of which are not related to teaching, although all students have had their own educational experience in the past. It is necessary to shape the idea of teaching that each of us has about a thoughtful teacher who does not act on impulse or intuition – or at least not always – and who incorporates reflection in their professional activity, together with the appropriate skills and knowledge. The present research is implemented in the subject: ‘Teaching Innovation and Introduction to Educational Research’ in the specialty of Language and Literature and Language Teaching of this Master degree. 45 students are involved in this subject (24 belong to the branch of English and the remaining 21 belong to the Spanish branch). The importance of this subject in the formation of secondary school teachers is the need that teachers have to confront and respond to the changes that have occurred in recent decades in society. All these aspects are discussed in this subject from three general units: innovation, research and evaluation, which is taught from a generic and multidisciplinary perspective in the first half and applied specifically in the field of specialty in the second part. As part of the subject’s assessment, the students are asked to work in groups in order to write a research proposal between 3000-4000 words, divided into two main parts: (i) theoretical background (definition of innovative teaching, main trends and authors and some examples of innovative projects), (ii) students define the innovative tool/resource they have chosen (e.g. blog, wiki, Webquest, forum, etc), then, they have to design a didactic unit with 3/4 tasks (describing target pupils, methodology, contents, competences, objectives).

In this paper, we analyse the virtual resources chosen and explained in their proposals and reflect their feelings and opinions about the implementations of these new technologies in a real secondary school classroom. Result show that these innovative tools can help secondary school teachers to enrich and improve the teaching/learning method by supporting the traditional method but, by no means, substituting it, however not all our students think about the possibility of implementing them in a class.

**Keywords:** Secondary school education, master’s degree students, innovative resources.

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**TOWARD WIDER EXPLANATIONS OF TECHNOLOGY ADOPTION: THE CASE OF SECONDARY EDUCATION TEACHERS IN BUCHAREST, ROMANIA**

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**Abstract**

A variety of theoretical models of technology adoption by individuals have been advanced including Innovation Diffusion Theory (IDT), Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Social Cognitive Theory (SCT) and Theory of Planned Behavior (TPB). TAM has general been the most influential and arguably has shaped important aspects of research. Its preferred variables, *perceived usefulness* and *perceived ease of use*, have usually been favored as principal direct effects on
technology adoption, often other variables being demoted, a priori, to the role of antecedents. TAM has also come under recent criticism for having had an oversimplifying effect on research. This paper aims to widen the universe of possible explanations of ICT use and intentions of use. We do so by means of a comprehensive study of direct effects on them, where most explanatory variables proposed by the main theories in the field are tested for simultaneously in a many-variable statistical study. The study is based on a survey of 845 secondary education teachers primarily from Bucharest, Romania. Our regression analysis (OLS) results show that: 1) a high percentage (60%) of variance is explained in both models; 2) the results of the use and intentions models are quite different; main relevant direct explanatory variables for use express capability, opportunity and social influence: ICT access, ICT skills, and observability; while the main explanatory variables for intentions are computer enjoyment, compatibility, perceived usefulness, image and self-efficacy denoting psychological motivations; 3) TAM variables, perceived usefulness and perceived ease of use, don’t play a very important role (the former is significant in the model of intentions only, and the later not at all), suggesting that broader models of direct determinants of technology adoption need to be constructed.

**Keywords:** Technology adoption, information and communications technology, secondary education, teachers, Romania.

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**EDUCATION AND ACCESS OF STUDENTS WITH VISUAL DISABILITIES TO CULTURE: REDEFINING THE ROLE OF MUSEUMS**

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**Abstract**

Museums in the 21st century have redefined their role in the society with the development of a wide educational and social role and in the context of an “audience centered” approach. In this perspective museums seek to remove different barriers of access in order to improve their relationship with their audiences, to promote educational opportunities to different people and to contribute to social inclusion and social cohesion. The present paper refers to a European project entitled “Bridging the Gap between Museums and Individuals with Visual Impairments” (BaGMIVI) which aims to support museums to develop various practices in order to enhance the access and inclusion of people with visual disabilities into their context and content with emphasis to schoolchildren with visual disabilities. A crucial factor for the access of schoolchildren with visual disabilities to museums is the training of museums staff not only in issues of visual disabilities but also in contemporary issues in inclusive education and differentiation. Issues of the development of a syllabus for museums staff training, the main axes and the thematic areas of the syllabus as well as the training course that took place in the participating museum in Greece are presented in this paper. Based on the experience of this training course, the feedback from museum staff and the development of accessible and differentiated museums programmes the authors argue that museums staff training in the above issues is very important not only for the improvement of knowledge about disability but also for the positive attitudes and the development of educational activities which can respond to the needs and characteristics of school children with visual disabilities.

**Keywords:** Students, visual disability, museums, museum staff training, inclusion.
EFFECT OF ORTHOGRAPHY ON ENGLISH AND ARABIC READING AND SPELLING IN LEBANESE FIRST GRADES: A COMPARATIVE PILOT STUDY

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Abstract
This study hypothesized that poor Arab readers should perform better in English (non-phonetic, orthographic language) decoding than in Arabic (phonetic-orthographic) because they rely on the orthographic route to compensate for their phonological deficits. To test this hypothesis, a group of Lebanese bilingual first graders comprised of normally achieving and poor readers and spellers were given tasks of decoding, orthographic discrimination, encoding and visual tests in both English and Arabic. Results of this pilot comparative study across ability and languages showed significant differences between good and poor readers on tasks of single word decoding and encoding and on the visual tests in Arabic. No significance was found between both groups on decoding of English words, orthographic discrimination and visual tests in English, suggesting that the deficient phonological skills of poor readers would hinder their word recognition in Arabic, yet their visual-orthographic ability would compensate for these deficits when reading English words. Further, different orthographies seem to require different cognitive skills. Implications for Arabic reading instruction are provided.

Keywords: Arab; Lebanese; reading; spelling; orthography; phonology.

WRITING WITH THE BODY. ACTION AND COGNITION IN TEACHING

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Abstract
Until a few years ago, the prevailing position in cognitive science was to consider the human body a brain accessory (Borghi & Iachini, 2004). During the last ten years this position was, however, overturned by a multitude of experiments and publications that have highlighted the importance played by the physical body in cognitive processes: it is claimed, in fact, that cognition is embodied (Embodied Cognition, Caruana & Borghi, 2013) and that it depends also by features of corporeal type. The student, using his body as the main tool for apprehension and communication, acquires knowledge and skills that, otherwise, would remain inaccessible; it allows him to participate actively with the world around him, giving him the opportunity to learn through experience, exploration, the relationship with the others, using his body to express, interpret and to know: that’s how it is really possible to realize the circular process of the body-action-cognition (Gomez Paloma, 2009). Starting from this analysis, the aim of the research was the acquisition of reading and writing skills using the educational method (Josiane Jeannot Method, Neri A., 2005), which bases its activities mainly on the use of the body, and to verify its effectiveness through the results achieved and the enjoyment rating perceived (PACES-it, Carraro, Young and Robazza, 2008). The research involved 69 children of 6-7 years divided into three classes and for a period of four months. The Jeannot method has been adopted only in two classes, in order to observe the difference of the achieved results, and in the same classes it was also given the enjoyment test adapted to the children’s age. The results obtained at the end of the meetings were very clear: the two experimental classes have reached an higher level of learning than the third class, that has acquired the reading and writing skills through the traditional frontal teaching method; and the enjoyment rating has strengthened the positive level of learning achieved, bringing a high score in the positive scale and a low score in the
negative one. In conclusion, the body didactics could be considered a valid alternative to the stereotypical frontal lessons, allowing also to teach the main disciplinary contents, but into dynamic and creative setting, where the body become a fundamental part of the teaching/learning process.

**Keywords:** Body, Jeannot method, enjoyment, learning.

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**BODY BECOMES BRAIN. THE SFERA METHOD FROM THE COMPETITIVE PRACTICE TO ITS PLAYFUL APPLICATION**

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**Abstract**

The choice of the topic "SFERA method" (Vercelli G., 2006), method used to improve mental skills connected to the body, is configured as research for new possibilities about the method application in the educational field. This research leads us to reflect not only on the advantage that athletes personally benefit from its application on a competitive level, but also on psychological and social benefits originating from the application outside the sports practice, thanks to its simple contents. Initially the focus was placed on the explanation of the SFERA method, an Italian acronym of the five factors that make the word up: SYNCHRONY, STRENGTH, ENERGY, RHYTHM, ACTIVATION. Subsequently then it moved to the individual understanding of each factor to understand their effective results. For thus optimize every single SFERA factor through the game, they have been proposed for the game - exercises for children aged 6 to 12 years, bringing the benefit that each factor produces to stimulate new mental skills. To do this, it is assigned to each factor of a minimum of two SFERA games.

**Keywords:** Sport, SFERA, games, children, education.
ORGANIZATIONAL ISSUES

DESIGNING, REDESIGNING AND IMPLEMENTING: HOW TO REDUCE DROPOUT RATES IN AN ITALIAN MULTICULTURAL MIDDLE SCHOOL

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Abstract
The presence of immigrant students in the Italian school system is now an established reality. Several international and national surveys have highlighted the performance gap between immigrant and non-immigrant students. Underachievement, dropout rates, and ineffective schools are unsolved issues for Italy. The school systems could play a central role in the promotion of authentic intercultural integration, designing real paths towards academic success for all pupils.

This paper reports the main results of an Action Research project, conducted from 2011 to 2014 in an Italian middle school with a high proportion (>30%) of students from immigrant backgrounds and/or at risk of dropping out. What are the goals of this longitudinal study? To encourage regular school attendance and to reduce dropout rates through an experimental integration year between middle and high school, combined with innovative, active teaching methodologies. The presentation highlights the strengths and weaknesses of each stage of the process. It focuses on time, space, teaching strategies, and on relationships with parents, other classes in the school and on the school network.

Keywords: Dropouts, equity, immigrant students, multicultural contexts, action research.

THE ROLE OF HIGHER EDUCATION IN ORGANIZATIONAL SETTINGS

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Abstract
The U. S. economic recovery relies on getting high-quality degrees into the hands of a larger, more diverse pool of people. Boards of institutions of higher education can help make higher education more productive by focusing on how to capture efficiencies, deliver instruction in new ways, and work smarter.

Boards should ask questions such as: 1) How can our institution target financial incentives to support graduating more students with high-quality degrees? 2) How can it use tuition and financial aid to incentivize students to complete their course work on time? 3) How can it implement low-cost, high-quality delivery approaches? 4) What business efficiencies can it achieve through joint purchasing, back-office consolidation, and other similar approaches?

Beyond college completion, colleges and universities should be concerned about learning outcomes. They should charge presidents and chief academic officers with ensuring that student learning is assessed and the data shared with the appropriate stakeholders.

Keywords: Corporate learning, adult learners, workplace.
JOINT APPROACHES TO RESEARCHER EDUCATION: INSTITUTIONAL POLICY, TOOLS AND INSTRUMENTS

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Abstract
This paper presents a set of general guidelines how best to assist small but increasing number of staff / researcher collaborative and transnational partnerships within the context of joint supervision of postgraduate research students. In practice, collaborative partnerships may represent many types of activity, including those of providing a specialized advice within one’s area of expertise, visit to a research lab, students exchanges and placements of varied duration. Research in the 21st century by its very nature is collaborative and academic collaboration whether at national and / or international level is common place. The primary focus and arguments of the paper it focusing not on various forms of collaborative activity, but rather on two types of collaborations - informal (limited) and formalized (extensive) collaborations. A plan (structure / focus) for this paper, includes discussion of i) benefits, risks and costs and nature of supervision of research students across institutions, ii) considerations when entering agreements for the joint supervision of PG research students and, iii) challenges in taking a policy led approach (including loci of decision-making). Against a back-drop of growing EC emphasis on Joint Degree Projects, and internationalization of doctoral candidate experience, this paper presents a policy development initiative and the associated methodology and practical tools (e.g. policy structures, flowcharts, templates) which may assist higher education institutions support, in a sustainable way, collaborative and transnational partnerships for joint supervision of postgraduate research students.

Research collaboration whether at national and / or international level is common place. In recent years doctoral education has changed: candidates go to other institutions for laboratory rotations, to undertake graduate training, and to access expertise. Their experience is increasingly mobile and internationalized, fuelled by EC initiatives such as Marie Curie. In parallel, institutions have begun to enter arrangements to jointly deliver programmes (most commonly at Master’s level). Establishing joint degrees is an explicit goal in the Bologna process and EU funding is actively encouraging this model at doctoral level. As a result of these factors, doctoral candidates and their supervisors are increasingly seeking formal, institutional recognition of PhD programmes. Nevertheless, institutional and national commitments to the concepts of joint and double degrees vary significantly, terminology is confused, legal positions uncertain. Underpinning our research is recognition of a need for a University policy led approach, to ensure that faculty and students benefit from jointly engaging in research with collaborators in other institutions, but that risks and costs are appropriately managed.

Modes of inquiry/ data sources and evidence: This research paper is based on a case study of the proposal, negotiation and adoption of a policy within the framework of one higher education institution and the development of related guidelines, methodology and practical tools to enable the recognition of joint informal and formalized collaborations at an institutional level. These instruments of university policy facilitate a shared understanding across a University about the extent to which it is desirable to formalize co-supervision arrangements with other institutions, and bring clarity to the context in which a University can support joint supervision and joint award arrangements for research degrees.

Results, Conclusions: Why it is timely for a research paper on this chosen topic? Internationalization is a rising phenomenon globally (EC, 11.7.2013:2) and important in the context of Erasmus + in particular, (historically Tempus, Erasmus Mundus and Marie Curie). Against a background of increasing competition and overtures from HEIs in the USA, Asia, the Middle East and Latin America, higher education in Europe needs to be strategic in managing and capitalizing on increasing number of staff / researcher collaborative and transnational partnerships. However, research has indicated that many educational collaborations are unsustainable, and institutions are not clarifying their strategic intent. This paper discussed the approaches to practical instruments and tools relating to management of risk, ensuring academic standards and bringing clarity to the context in which a University can support joint supervision and joint award arrangements for research degrees.

Keywords: Academic collaboration and its types, joint supervision, concepts of joint degrees/awards, postgraduate students, policy approach.
CAN AN INVESTIGATION OF PROMOTION, RECOGNITION AND TENURE STRATEGIES AND STRUCTURES IDENTIFY STRATEGIES TO PROMOTE SERVICE-LEARNING PEDAGOGY WITHIN THE HIGHER ACADEMIC COMMUNITY?

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Abstract
At most universities in the USA today, a faculty member is expected to be engaged in teaching, research, and service. Each institution’s focus may vary; some universities may place greater emphasis on teaching, while at others focus may be on research. While service activities are appreciated, it may not get as much recognition in a faculty member’s evaluation for tenure and promotion at some universities. Thus promotion of “service-learning pedagogy” becomes challenging. Can this gap be bridged? Can an investigation of promotion, recognition and tenure strategies reveal any insights? Can this investigation lead one in identifying strategies to promote service-learning pedagogy within the higher academic community?

Four Kansas Campus Compact (KSCC) Faculty Fellows (henceforth known as the authors) located at four different universities in the state of Kansas undertook a research project to understand how the “scholarship of engagement” (Boyer, 1996) is evaluated at the institutes of higher-learning in Kansas. They started their research by conducting literature reviews on this topic to understand major trends and issues related to promotion of service learning. Based on these reviews, a survey instrument was developed and distributed online to Kansas Campus Compact (KCC) member and non-member institutions. The survey questions were developed to gain insights into how service learning activities are evaluated for promotion and tenure at universities in Kansas. This paper documents the results of their literature reviews. The detailed survey results are published as a separate article given the page limitation of this proceedings.

Keywords: Higher education, service learning pedagogy, tenure evaluation, promotion, scholarship of engagement.
Workshops
DEVELOPING WISDOM IN SCHOOLS

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Abstract
The purpose – In as much we take the child out of his reality and place him into a classroom to learn knowledge and skills that we wisely impart to the student, the virtual global village takes the child out of the classroom with this knowledge and skills to apply it to real life 21st problems. In so doing, the teacher becomes aware of the personal knowledge and skills of the student as the student demonstrates his wisdom in self-learning. Differentiating Methods - Inquiry (virtual library), global discussion (chat round table room), group projects (model whiteboard room) and portfolio evaluation (virtual stage or performance room) do not fit within our present manner of instruction with presentations, learning exercises, homework assignment and tests. In the former, we require the teacher to listen to the student while in the latter, we expect the student to listen to the teacher. In introducing the virtual global village, we can now also do the former for a 21st century learner. Design – How you may ask? Through this workshop, those in attendance will learn how to guide the student in making problem inquiries about the present (early grades), the past (middle grades, the future (junior high) and human relations as well as globally discuss them, form groups to find solutions and assess one’s own portfolio in doing so to the point of becoming ready for life upon graduation. Aims – Hence the workshop looks at what we have achieved, what still needs to be achieved and how we can change our educational system to bridge the gap. In doing this, it makes a distinction between the student listening to the teacher which is the nature of instruction and what universities have been doing for centuries and teacher listening to student in guiding the student through their own self-study on the problems of today which is the very purpose of global universities. Procedure – The introduction will deal with the old and new ways to deal with Hindsight, insight, foresight and “geosight” with a chart comparison. It will then proceed to examine how procedures change at various grade levels through four figures and feedback from audience from their own experience. These wave levels will cover present reality of the lower grades, past and present of middle grades, future wave of junior high and social adaptation of senior and higher grades.

Keywords: Wisdom, hindsight, insight, foresight, geosight.

TELL ME A STORY FROM THE AMAZONS, PLEASE!

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Abstract
In order to promote critical thinking while teaching English as a Foreign Language among Elementary School, High School or with undergraduate university students, we have used traditional folktales from the Amazons throughout different Creative Writing and Illustration Workshops using the Education for the Sustainable Development as a powerful tool. Most of the changes established throughout these workshops modifies the previous paradigms on our students while producing a creative production based on cross-cultural stories. The purpose of our workshop is to share this experience with other teaching professionals that would like to pretend to become students again and learn-by-doing. Firstly, we will introduce an icebreaker activity regarding our previous knowledge associated to the Amazons using exclusively maps and images. Afterwards, we will divide the whole group into an even number (preferably, maximum 40 members in 10 groups of four members) and hand in a different
traditional oral tale to each group. Each group, while underlining the possible unknown vocabulary, must read the story they have been assigned. Then, our creative group production starts: by re-telling the major events of the story while illustrating a major image(s) that will support their re-storytelling. Several recycling materials will be handed in to each group to back their artistic response. Adding spontaneous changes are more than encouraged. Finally, all of the participants will share their illustrations and re-tell the folktale, reinforcing the importance of avoiding by means of globalization the extinction of local cultures and traditional folktales.

**Keywords**: Education for sustainable development, creative writing, workshop, English as a foreign language.

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**THE ROCK STAR SOCRATIC SEMINAR WITH LIVE DIGITAL FEEDBACK**

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**Abstract**  
Participants will discuss the specific educational differences between “being an advocate” versus “advocacy” across local-to-international social, political, and economic platforms. The Inner/Outer Socratic Seminar will form the backbone of group discussion in addition to real-time, ongoing digital observations/conversation. Teachers participating in this presentation will take away detailed teaching methods that will introduce a hands-on, multi-tiered Socratic Seminar that can be transitioned from teacher control to complete student-centered management over the course of an entire year. Instructional methods that underpin deep reading & writing analysis of informational texts with collaborative participant-driven speaking and listening techniques will be shared both digitally and via hard copy. This seminar style can easily segue itself into something philanthropic, expanding beyond the traditional brick and mortar classroom.

**Keywords**: Socratic, seminar, methodology, digital, authenticity.
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