

Book of Abstracts

Edited by Mafalda Carmo



Edited by:

Mafalda Carmo

World Institute for Advanced Research and Science (WIARS), Portugal

Published in Lisbon, Portugal, by W.I.A.R.S. www.wiars.org

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ISBN: 978-989-99864-9-7

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Dear Colleagues,

We are delighted to welcome you to the International Conference on Education and New Developments 2018 - END 2018, taking place in Budapest, Hungary, from 23 to 25 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 2018 received 624 submissions, from more than 50 different countries, reviewed by a double-blind process. Submissions were prepared to take form of Oral Presentations, Posters, Virtual Presentations and Workshops. The conference accepted for presentation 168 submissions (27% acceptance rate). The conference also includes two keynote presentations from internationally distinguished researchers, Prof. Dr. Zoltán Rónay (Ph.D, Associate Professor) Research Group for Higher Education and Innovation, Institute of Education, Faculty of Education and Psychology, Eötvös Loránd University, Hungary, and Prof. Dr. Gyöngyi Bujdosó (PhD, Senior lecturer) Faculty of Informatics, University of Debrecen, Hungary, to whom we express our most gratitude.

This volume is composed by the abstracts of the International Conference on Education and New Developments (END 2018), organized by the World Institute for Advanced Research and Science (W.I.A.R.S.). 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**: Critical, Thinking; 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, 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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"RESPECT FOR HUMAN DIGNITY: AS A FRAMEWORK AND SUBJECT OF EDUCATION IN THE LIGHT OF PRESENT CHALLENGES"

Prof. Dr. Zoltán Rónay

(Ph.D, Associate Professor) Research Group for Higher Education and Innovation, Institute of Education, Faculty of Education and Psychology, Eötvös Loránd University (Hungary)

Abstract

Near the third decade of 21st century, we must face many challenges, which affect our everyday life. Some of them belong to the technological development, and others are in relation to social and natural demands. Among them, such phenomena also appear, which are well-known in the school system, but their appearance transforms resulting from the aforementioned challenges. In the first case, digitalisation can be mentioned, which can be both a blessing and a curse: it promotes the education but can endanger the human relationships through isolation, and mobbing, bullying. In the second case, it is reasonable to talk about migration, including developing the aptitude to recognize real and false dangers; facilitating the social integration of the disadvantaged migrant children (and their family) in the school, the tools which can help them, and also the inclusive community. The third case includes the problem of both aggression and black pedagogy. Aggression is not a new phenomenon, but with the help of digitalisation, it can appear in new forms. Digitalisation makes the way of mobbing and bullying easier not just within the school, but for strangers out of school. Moreover, migrant children can be a new target for these actions. Finally about an old pedagogical problem: the phenomenon of so-called black pedagogy is connecting either to the assessment or disciplining in school.

If these symptoms affect either directly or indirectly the life of any child, the school must handle them. Many of the researchers investigate the phenomena mentioned above from the education science's point of view. Many of the researchers develop pedagogical tools to answer to these challenges. The presentation offers a new perspective. It gives an overview of this topic, presenting (the respect for) human dignity on the one hand as a framework in education and as the subject of teaching on the other hand. Human dignity as a framework is especially relevant to interpersonal relations within the school, but it is also important as a subject of teaching and education. Namely, it is necessary to teach the student to be an empowered citizen, to own the ability of legal knowledge and to respect the rights of others. But to secure it, it is essential to prepare the future teachers to know their rights and the barriers. The presentation proposes a method, which will be applied from next semester for the teachers training programme at Eötvös Loránd University.

Keywords: Fundamental rights, aggression in school, black pedagogy, digitalisation, social integration.

Biography

Zoltán Rónay was born in 1976 in Budapest, Hungary. He graduated in 1999 as a lawyer at Eötvös Loránd University Faculty of Law. He is Ph.D. on law and political sciences (University of Szeged Doctoral School of Law and Political Sciences, 2017, the title of his dissertation: *Individual and corporate liability within the governance of higher education institutions*). Before getting his master degree, he did his practise at the Department of Constitutional Affairs in the Office of the President of the Hungarian Republic.

After his studies at the university, he began to work as a junior clerk in the Rector's Office. Later he was appointed to the head of Department of Law, Administration, and Human Resources Management. At the

same time, he was working as lawyer candidate besides the distinguished Hungarian lawyer and legal lecturer, the late Daisy Kiss (Dr. Kiss Daisy Law Office). After the obligatory practical work and passing specialist examination, he became solicitor and partner of Dr. Kiss.

In 2006 he successfully applied for secretary general of Eötvös Loránd University. He was re-elected in 2011. His appointment of secretary general was recalled in 2015 when the Parliament reorganised the governing system of Hungarian state higher education institutes on government's motion. This amendment inaugurated the legal institute of the chancellor.

As an additional activity at the university, he is the university commissioner responsible for coordination of organization matters of integration between the Faculties in Szombathely and the Savaria University Centre of University of West Hungary and Eötvös Loránd University, during this project.

As a complementary activity, he is the President of Student Academic Appeals Committee. This appointment is pursuance of the work he carried on as secretary general ex officio. Except for this activity, his work in connection with the university leadership was ended in summer 2017.

In 2017 he successfully applied for a senior research fellow position at Eötvös Loránd University Faculty of Education and Psychology, Institute of Education. He joined the Research Group for Higher Education and Innovation. In the beginning of 2018, he became an associate professor at the same place.

As a university lecturer he regularly has courses in Pedagogy BA (Legal background and control of education and school; Educational governance and regulation), Educational Science MA (Education, Economy and Law; Leadership of institutions of higher education), Community Coordination BA (Foundations of Jurisprudent), Sports manager and recreation and health promoter BSc (Elementary Political Knowledge). He is a supervisor in Education Doctoral Programme. Apart from these regular courses, he has founded several optional courses: Liability of university executives; The legal and ethical frameworks of the teaching profession and Legal Frameworks of Education Research in Education Doctoral Programme. He elaborated the following courses in Human Resources BSc: Elementary knowledge about State and Law; Economic Law; Labour Law I-II.

He is a co-founder of the Education Management Specialisation of Educational Science MA. He is officially responsible for the following courses: Educational governance and regulation; Leadership of institutions of higher education; Strategic Management in Higher Education; Operation and Management of (Educational) Organisations; Internship; as well as for all the courses founded and elaborated by him.

His educational activity is not unprecedented. After his master degree, he instantly started to teach at Eötvös Loránd University. He was a part-time lecturer at Department of Civil Process Law and Department of Constitutional Law and in several programmes of the following courses: Civil process law, Civil process Law in connection with real properties at Institute for Postgraduate Legal Studies. Because of the amount of his work as secretary general, he was forced to abandon these activities. He has been committed to supporting talents. He has led a civil law course in Bibó István College since 2005. His student won 2nd prize in the 27. National Conference of Scientific Students' Associations ("OTDK") in the section of law and politics.

His scientific interest ranges over the law and legal history of education; related to this fields the labour law, administrative law and civil procedure in education. His main research field is the responsibility and liability in operation of higher education. Apart from these fields he handles the law in teacher's training and education, especially with teaching and developing legal knowledge in teachers training.

He regularly publishes. His monography (working title is Legality and Ethics during the Teacher's career) is under editing.

He is organiser and participant of several scientific sessions.

He organised the **Civil Procedure of 21st century Conference** and **The electronic payment order and the notarial function**; both for the Hungarian Lawyers' Association Section for Civil Process Law. He gave presentations in several scientific programmes:

- About the secretary generals (Eötvös Loránd University Faculty of Education and Psychology, Higher Education Management Workshop) – English title of presentation: *The role of secretary general in the leadership of higher education institutes*;
- Autonomy in public (constitutional) law science (Hungarian Academy of Sciences, Centre for Social Sciences Institute for Legal Studies) English title of presentation: *The position of Autonomy of Higher Education in Public Law*;
- Hungarian Higher Education Conference 2017 (Corvinus University Budapest, Center for International Higher Education Studies) English title of presentation: Sector's control and management in light of managerial responsibility;
- The 16th Conference on Educational Assessment CEA 2018, Szeged, Hungary (The Institute of Education, the Doctoral School of Education at the University of Szeged, the MTA-SZTE Research Group on The Development of Competencies and the Educational and

Psychological Committee of the Hungarian Academy of Sciences in Szeged) – English title of presentation: *The pedagogical idea of pupils' assessment in the light of Act on Public Education*;

- Education Economy Society: Hungarian Conference on Educational Research HuCER 2018, Székesfehérvár, Hungary (HERA – Hungarian Educational Research Association) – English title of presentation: *Wondering, what the consistory is*;
- Education in Modern Society: XVI Annual International BCES Conference (Bulgarian Comparative Education Society) Title of presentation: *Centralizations and Autonomies: The Delimitation of Education by the Hungarian Government.*

He is a member of Scientific Committee of the Conference of 2nd Danube Conference for Higher Education Management: In search of excellence in higher education (Corvinus University of Budapest and Ulm University), which planned date is late November in 2018.

Several professional bodies and projects count on his expertise. As secretary general, he was the president of Hungarian Rectors' Conference Collegium of Secretary Generals (Committee of Secretary Generals and Office Heads) between 2010 and 2015. As an additional professional public activity, he was a permanent guest on Round-table for Higher Education, as well as a delegate of Hungarian Rectors' Conference on Round-table for Higher Education Expert Team for Students' Responsibility in 2013. From 2007 he had been the secretary of Hungarian Lawyers' Association Section for Civil Process Law for five years. Today he is a member of Platform for Training in Economic Science, previous he was an expert team member of a project called "Reorganization of training in economic science" and co-editor of working paper titled "Possible directions of reorganization of training in economic science".

He is the project manager for the project "Anxiety versus ego strength – Investigating the ingredients of perceived safety: development of intervention tools and programmes for different actors and institutions functional at various segments of social safety", which has just won with his partial management almost 800.000,- Euros subsidy from the Hungarian State.

He is member of HERA – Hungarian Educational Research Association as well as Hungarian Academy of Sciences Public Body IX. Section of Economics and Law Committee on Legal and Political Sciences. He speaks and publishes – apart from his native Hungarian language – in English and German.

More information on the internet:

http://www.ppk.elte.hu/munkatarsak/Ronay_Zoltan https://www.researchgate.net/profile/Zoltan_Ronay

"SMART INTERNET, SMART APPLICATIONS, SMART EDUCATION"

Prof. Dr. Gyöngyi Bujdosó

(PhD, Senior lecturer) Faculty of Informatics, University of Debrecen (Hungary)

Abstract

Education has to always change because the environment and the conditions are changing in every second. Students live a smart technological life, they do not only use technology, but they live it. Education must follow the achievements of sciences, and it has (or should) use modern technology. New smart devices and software applications must be applied for improving the educational efficiency not only because education needs to transfer information faster, but because they may fit the educational methods into the students' everyday life. Students have smart devices, spend their free time with smart applications in smart virtual environments. When they step or look out from their 'normal' milieu in, e.g., a scholar environment, they find themselves in a little bit strange, very slaw, quite simple and not sufficiently motivating environment. How can we motivate these students? How can we involve them in tasks that require long and deep concentration? What kind of software and hardware technologies should we use for making the learning processes more motivating? In the other hand, do students have suitable and sufficient knowledge to use new technologies – others then the smart phones and the well-known applications – without pre-training them? Does education pay attention to train their students to be prepared for the new technological developments?

We have many adequate questions concerning smart education. There are number of surveys with the aim to discover the students' needs and the effectiveness of the applied new educational methods on each level of education. All of them can help us to get closer to choose optimal solutions for our educational processes.

In this presentation we attempt to discuss about some important concepts and some major definitions of this field. We present some good practices that can bring closer the educational methods and processes to the students' everyday operations. That is one of the most important and sometimes extremely complex task for educators of the future.

Short Biography

Gyöngyi Bujdosó, PhD, is a senior lecturer at the Faculty of Informatics, University of Debrecen in Hungary. She has MSc degrees on Mathematics, Computer Sciences and Chemistry, DEA and PhD in Informatics.

She worked as a database programmer and as the copy-editor of some scientific journals. Later she became a lecturer at UD. She has had courses in several fields of Computer Sciences.

She is the E-learning Coordinator of the university's Teacher Training Center, a member of the Women in Informatics Research and Education at Informatics Europe, and a regional representative of the Women in Sciences Association.

Her research interest includes Electronic Teaching, Information Transfer in Virtual Reality, IoT and ICT in Teacher Training, E-Learning, Designing and Developing Digital Curricula, Digital Literacy, Gender Studies.

More information on the internet:

http://inf.unideb.hu/hu/bujdoso.gyongyi

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TEACHERS AND STUDENTS

LIVE2WORK PROJECT: INCREASING THE CHANCES FOR SUCCESSFUL INTEGRATION OF PEOPLE IN SITUATIONS OF PROFESSIONAL VULNERABILITY

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Abstract

The project Live2Work is an ERASMUS+ Key Action 2 Strategic Partnership for cooperation and the exchange of good practices involving four countries (Portugal, France, Denmark and the Czech Republic). Its purpose is to develop an intervention methodology for end-users working with young adults (18-30 years) in situations of professional vulnerability, including migrants and refugees. Throughout this communication, we intend to briefly present the six outputs that constitute the project, namely, the theoretical handbook, the toolbox, the course guide, the in-service training courses, the online audio-visual learning scenarios, and the Moodle courses and learning platform on website. Particular attention will be given to the challenge of refugees' integration on a global scale, and to the theoretical rationale (with contributions from career normative models, career design, construction and management models, career systemic models, and career culturally adequate models) based on tendencies that value: (i) the personal system, (ii) the contextual system, (iii) the temporal system, (iv) complexity, chance, unpredictability and instability of life contexts, and (v) personal agency.

Keywords: Live2Work project, life projects, professional vulnerability, young adults, migrants and refugees.

A COMPREHENSIVE APPROACH TO LEADERSHIP IN EDUCATION

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Abstract

The study examined the implemented process to assess and track the skills of leaders in education. This process includes mentoring, formal and informal coaching. It takes into account leaders' ability to base their decisions on a set of values they can easily defend and how they create a positive emotional climate in their environment. In this qualitative study participants were part of a purposive sample. The data collection was semi-structured interviews with focus on the concept of leadership and its development. The results of the study have provided a contextualized perspective of leadership in education that comprises of different forms: shared leadership, cultural leadership and pedagogical leadership. These forms of leadership are reflected in the way that leaders reach their goals and understand the challenges they face to ensure the collaboration of their staff.

Keywords: Transformational, leadership, collaboration, professional, community.

THE EFFECT OF COLLABORATIVE LEARNING ACTIVITIES ON HIGH SCHOOL STUDENT BELIEFS, CONFIDENCE, AND LEARNING STRATEGIES IN CHINESE LANGUAGE INSTRUCTION

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Abstract

A growing number of students in U.S. schools are learning Mandarin Chinese. In 2013, Mandarin was the second-most popular foreign language offered in U.S. public schools. Educators continue to seek ways to improve learning outcomes that are compatible with the increasingly diverse student populations in foreign-language classrooms. Can collaborative learning activities help achieve this goal?

This study explored the effects of collaborative learning activities on learners' attitudes, beliefs and learning strategies in Chinese language instruction for non-native speakers. Thirty-five English-speaking suburban public high school students in the Midwestern United States in Chinese language classrooms participated in collaborative projects as part of their class activities. Each student took Chinese class every day of the week for 45 minutes. Identical pre- and post-surveys with three different scales were used to collect data. A "Beliefs about Chinese Learning" scale included 17 Likert-type questions on a five-point response scale (1 = strongly disagree, 5 = strongly agree). A "Confidence in Ability to Learn Chinese" scale students rated how sure they were of their ability to complete a variety of specific Chinese learning tasks. A "Language Learning Strategies" scale included 28 Likert-type questions on a five-point response scale (1 = never or almost never true, 5 = always or almost always true). Students rated how often they use each of the strategies listed in learning Chinese.

The results from the paired t-tests indicated that there was a significant change in student beliefs (i.e. they came to believe that learning Chinese was much more important in their lives) from pre-survey to post-survey (t[34] = 15.26, p < .001), student confidence in their ability to learn Chinese (t[34] = 8.39, p < .001), and use of strategies (i.e. student tendency to use a wider variety of learning strategies more frequently, t[34] = 19.82, p < .001). In addition, they showed pleasure in collaborative learning and work in which they participated and only one student indicated a preference to finish work individually. Most of the students concurred that collaborative tasks provided them more opportunity to experience different points of view, work effectively, help each other, and make more use of the Chinese language.

Keywords: Collaborative learning, Chinese learning, motivation, confidence, strategies.

COMPARING TRADITIONAL LEARNING MATERIALS WITH THOSE CREATED WITH INSTRUCTIONAL DESIGN AND UNIVERSAL DESIGN FOR LEARNING ATTRIBUTES: THE INSTRUCTORS' PERSPECTIVE

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Abstract

There are foundational universal design for learning (UDL) principles that support accessibility and inclusivity that can be incorporated into instructional materials. Universal design for learning is also referred to as universal instructional design (UID). Although UDL has been in the curriculum development stream for some time, creating instructional materials that are accessible and inclusive for Vocational Trades Education (VTE) is a comparatively new endeavor. Challenges most faculty face regarding UDL is acquiring the skills needed to apply UDL principles and then having the time to design materials that meet the needs of most learners.

This paper discusses the UDL principles employed in instructional materials that were created to teach piping trades students how to solder and braze copper pipe. A summative quantitative and qualitative analysis was conducted with faculty to determine whether the new materials had more or less instructional impact than the original curriculum. The findings showed that significant positive differences did exist between the new curricula as compared to the original materials.

Keywords: Universal design for learning, accessibility, inclusivity, universal instructional design, vocational.

EFFECTING PEAK PERFORMANCE UNDER PRESSURE: MENTAL PRACTICES OF ELITE ATHLETES SUCCESSFULLY APPLIED IN TEACHER TRAINING

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Abstract

Techniques to relieve stress, reduce anxiety and control emotions are all-important for athletes to perform at optimal levels under massive amounts of pressure. This qualitative multiple-case study shows how teacher trainees can successfully use the same effective sports psychology techniques as elite athletes. They too must cope with competitive stress and extreme pressure during courses for teaching practice and assessment.

Findings show that teachers commonly reported over-stress and burn-out symptoms, even during short courses for experienced teachers. The predicaments of athletes – anxiety about pleasing fans and worry about them turning against them; wide broadcasts of their mistakes and personal lives, intimidating competition– can compare to the experience of teachers who must please parents, students, administrators and trainers, with varying demands, while under tight schedules, low pay, and little gratitude.

Noting the severe and urgent need for trainee stress management skills, the author introduced over five years six routine sports psychology techniques to minimize debilitating fear and reduce discouragement: Positive Self-talk; Imagery; Relaxation Exercises; Mental Rehearsal; Affirmations; and Self-image Analysis.

Among more than 500 trainees, just the first two of the six sports psychology techniques were seen to make overnight differences for those lacking self-confidence. One trainee nearly dropped out of the program before applying those two techniques so successfully that upon graduation, she received the top performance awards in all final tests. This paper posits that when teachers learn to manage their minds using well known (among athletes) sports psychology routines, they can also enjoy managing their classrooms, and their careers, with new vigour. The author recommends this simple and elegant approach for increased success in teacher training programs worldwide.

Keywords: Teacher training, confidence building, learning anxiety, sports psychology.

BATTLING ZERO-TOLERANCE IN SCHOOLS AND THE SCHOOL-TO-PRISON PIPELINE

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Abstract

School uniforms in public schools, larger school security forces, hallway cameras, and metal detectors at school entrances, are part of zero-tolerance disciplinary policies criminalizing Black and Latino youth, alienating them from school, and feeding what has come to be known as the school-to-prison pipeline. Even young students are not exempt. Zero-tolerance disciplinary policies transform minor transgressions of school rules from educational opportunities into disciplinary matters where students are subject to suspension and involvement with police and courts. Zero-tolerance policies were implemented in schools despite research showing they were detrimental to student emotional and academic growth and reproduced the types of behavior they were intended to prevent. The push for zero-tolerance policies in schools and society was feed by media generated frenzy and racism and has disproportionately affected

African American and Latino youth. While incarceration decimates families and communities, it is also a source of major revenue for private for-profit prison companies. The belief in the need for these policies has become virtually hegemonic in the United States in both White and minority communities. However, there have been cracks in the school-to-prison pipeline and challenges to zero-tolerance policies that point to change in the future. These include student campaigns, policy changes, and efforts by the Black Lives Matter movement.

Keywords: Schools, discipline, racism, criminalization, zero-tolerance.

DIFFERENTIATE TO INCLUDE. AN EXAMPLE OF DIDACTIC INTERVENTION IN A LOWER SECONDARY CLASSROOM

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Abstract

The creation of meaningful learning situations across the classroom is one of the goals that teachers of every school level seek to target. School reality in its complexity presents to teachers great challenges in terms of adapting their teaching to the "daily educational needs" of each student. The paper moving from a reflection on the construct of school inclusion will focus on teaching strategies useful to define a classroom as inclusive. In particular, the attention will move to the didactic differentiation, a strategy that, according to the recent pedagogical literature, can be useful to meet the specific educational needs of every student from the pupil with difficulty to the gifted pupil. Within a variety of methodologies available to the teacher, differentiation aims to cover the wide spectrum of situations that may occur in the classroom trying to foster every child's potential. The paper will conclude with an example of a good educational practice in an Italian middle school. A specific didactic unit will be illustrated and the limits and advantages of this approach within the Italian context according to teachers' perspective will be discussed.

Keywords: Inclusion, differentiation, giftedness, didactics, classroom.

HOW VET TEACHERS IN HUNGARIAN VET SCHOOLS CONCEPTUALISE THEIR OWN PROFESSIONAL DEVELOPMENT

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Abstract

The subject of our study is the continuous professional development (CPD) of VET teachers and trainers working in upper-secondary VET schools in Hungary. In line with the transformation of the concept in the past decades, we understand teachers' CPD as their continuous, lifelong learning, which is grounded in social settings and embedded in schools (*Putnam and Borko 2000, Sleegers et al. 2005, Scheerens 2010*). Research on teachers' CPD has so far focused on teachers working in general education and the professional learning of VET teachers - which is based on characteristically different system, organizational and individual level factors and development needs - is a rather under-investigated area (*Parsons et al., 2009, Cedefop, 2010, Fejes-Köpsén 2014, Koski-Heikkinen et al. 2014*).

The empirical basis of our investigations is the analyses of documents prepared by VET teachers who took part in a 2015 pilot project as first applicants to the new 'master teacher' category of the recently introduced teacher career system. Teachers who wish to obtain the title of 'master teacher' and a salary increase have to prepare a 'master programme' that they will implement in the next five years, thus contributing to the improvement of their school or wider environment and thus the effectiveness of the education system. Applicants have to submit an analysis of their professional career as well, detailing the path, context and outcomes of their own professional development. Our main research question is: How

do these VET teachers conceptualise their own continuous professional development in the design of their master programme and in the analysis of their own professional career?

Our research method is the content analysis of these two types of documents. The coding of the 'master programmes' was carried out by a research team at ELTE University, using a coding system based on concepts and variables employed in OECD's TALIS and a previous large-scale national teacher survey. The database includes 813 master programmes, 202 of which were prepared by teachers working in VET schools, including 67 VET teachers. The professional career documents were analysed by using a content analysis software. Quantitative data obtained is analysed using the SPSS software and applying descriptive statistical methods and multi-variant analysis (correlation and regression analysis). Our initial results show that the focus of VET teachers' CPD is on the formal aspects of their teaching work (curriculum, teaching material development) and they pay less attention to the pedagogical aspects.

Keywords: Continuous professional development, teacher learning, vocational education and training, life history.

DEVELOPING A UNIVERSAL TALENT SCORE TO ASSESS TEACHERS' TALENT IN HIGHER EDUCATION

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Abstract

The Universal Talent Score (UTS) is a newly developed talent metric that acts as an indicator of the competence and value-creating capacity of an employee – even prior to recruitment. The results of the UTS may be used to optimize performance and place the right talent in the right place. The calculated score may help employers in workforce planning as well as in all the human resources functions of recruiting, onboarding, training, and succession planning. Although the need for talent is universal across all industries, it becomes very specific as we zoom in onto particular job functions. In other words, the magic recipe to become a successful civil engineer is not the same as that of a successful project manager, software developer, or teacher. Although some ingredients are surely common, others are specific to one recipe and not the other. In its new updated version, The Universal Talent Score now comprises of four specific assessments to measure the degree of talent available or required by potential recruits or existing employees who are teachers, project managers, civil engineers, and software developers in order to succeed in their roles. The research in this paper specifically focuses on using the tool to assess the talent of teachers in higher education. Let's Measure Talent to Manage It!

Keywords: Talent management, talent measurement, education, talent score, human resources.

LIVING IN SPAIN: EXPERIENCES OF IRISH ERASMUS STUDENTS

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Abstract

Living and studying in another country requires students to pursue a process of integration and immersion into a number of areas of life, among them university itself, as well as social and cultural events and day-to-day activities, all of which require relationships to be built. As English has become the *lingua franca* in many countries, supported by widespread use of Internet and social networks, English-speaking students nowadays face greater challenges to using Spanish as a means of communication in order to fully integrate into the host country.

Engberg and Jourian (2015) advocate the idea of intercultural wonderment, which entails students pushing themselves beyond their comfort zone and immersing themselves in the culture of the host country, as contributing to students' development of a global perspective. However, students' varying attitudes during study abroad are key to integration into the different domains in which they live (personal, academic, social/cultural). While research on study abroad is abundant, and students' gains

during their study abroad are generally positive, less attention has been paid to how affective factors contribute to Erasmus students' integration into the host country.

This paper aims to identify the strategies adopted by a cohort of students from an Irish university during their year abroad in Spain as a means of explaining their process of integration into the host country. The data used for this study were an integral part of a module completed by the students during their study abroad, where students wrote two reflective assignments in Spanish to analyse their experiences during study abroad. A content analysis approach was adopted, with results showing that students who made efforts to move out of their comfort zone had a positive experience of integration. The experiences of students who did not integrate so successfully are discussed and recommendations that may be relevant for students and institutions in their preparation for study abroad are provided.

Keywords: Study abroad, integration, foreign languages, higher education, reflection.

INTERCULTURAL AMBASSADORS AT SCHOOLS AND IN TEACHER EDUCATION

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Abstract

Dealing with cultural heterogeneity has become one of the most crucial challenges for teachers making it necessary to linguistically and culturally diversify teacher education. The project "Intercultural Ambassadors at Schools and in Teacher Education", which is part of the project KALEI within the framework of the nationally funded programme "Qualitätsoffensive Lehrerbildung", aims precisely at this kind of diversification:

Initiated at the Centre for Teacher Education of the University of Halle as a measure of professionalisation, it has the intention to raise prospective teachers' awareness of different beliefs and values in culturally heterogeneous teaching/learning environments. In so doing, it defines the dimension of plurilingualism as a vital component of cultural diversity, which is inseparably linked to culturally heterogeneous interpretive schemes.

Accordingly, the immediate experience of cultural as well as linguistic differences is at the centre of the project. Teacher trainees are put into a teaching/learning situation where they first experience and later reflect on the cultural dimension of their individual idea of school and teaching. This very setting is created by bringing together foreign students, prospective students from the "Preparatory German Courses for Refugees" and teacher trainees in the stage of teaching practice placements.

The project participants start with the course "Cross-cultural Mediation and Linguistic Awareness", where they set up culturally mixed Co-Teaching-Teams.

During the teaching practice placements, teachers from participating schools as well as cooperating teaching methodologists of the various subject matters of University of Halle accompany and support the culturally mixed teams in different stages of preparation, realisation and reflection of the Co-Teaching-Lessons. The project is recorded (audio and video) and scientifically evaluated. Interaction patterns of the different teams are contrasted employing the Documentary Method, additionally a case comparison with regard to different school forms is implemented. Further research questions focus on implicit and explicit value systems:

- How do teacher trainees deal with plurilingualism and culturally shaped ideas of school and teaching within the intercultural cooperation situation (Co-Teaching)?

- Does the experience of the intercultural cooperation situation have an influence on the attitudes of teacher trainees, foreign project participants and/or pupils towards linguistic and cultural heterogeneity?

- Does the cooperation affect the teacher trainees' expectation of self-efficacy relating to teaching situations in culturally heterogeneous groups?

It is planned to continue the project and broaden its research focus to include participating teachers and teaching methodologists. All collected data are processed for the digital case archive developed by KALEI.

Keywords: Teacher education for diversity, cultural heterogeneity, plurilingualism, co-teaching.

TO USE OR NOT TO USE? QUESTIONING WHILE CONDUCTING A DELPHI-TYPE EXERCISE IN HIGHER EDUCATION

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Abstract

This paper presents the outcomes of a segment of the research work completed in the framework of a more comprehensive doctoral study aiming at developing a "universal talent score" – for better talent management. It explores the possibility to combine the advantages of Delphi technique and group decision theory – developing a computer-aided instrument designed to measure the talent by providing a talent score. This instrument was tested in the higher education environment. Based on literature survey, a consistent set of talent measurement criteria was constructed. Consequently, *the focus of this paper* is on estimation of the weights of the criteria used. In order to estimate the respective weights in case of university professors, a Delphi-type exercise was conducted among respected academics across the world. Sound results were obtained just after the first round of queries. However, while conducting the exercise, some issues were identified or signalled by participants – that have fed the *Hamletian* question about Delphi: *To be* or *not to be* [recommended to be used]?

The authors prefer - instead of giving a definitive verdict - to offer a list of advantages versus disadvantages - turned into recommendations. In addition, the lessons learnt during this Delphi-type exercise might be valuable for both theorists and hands-on researchers on higher education issues.

Keywords: Delphi-type exercise, higher education, university professors, universal talent score (UTS).

PARENTS' AND COMMUNITIES' VIEW AND ATTITUDE TOWARDS TEACHERS IN RURAL MALAWI

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Abstract

In recent years, there has been an increased pressure on teachers to *reach and teach* all learners with accompanying expectations on higher standards for teachers. It may be argued that teachers' perception of support and validation from stakeholders may have a considerable impact on the quality of education and hence learners' performance. Thus a supportive environment for teachers, whether inside or outside of the school may be considered essential. In order to gain some perspective on the attitude towards primary school teachers it is important to answer questions such as how do teachers and head teachers collaborate? What is the relationship between teachers and parents? What is the community's view on teachers? For the purpose of this study, the attitude towards primary school teachers in Malawi was explored in four rural primary schools.

This study forms part of my doctoral research where I explore the interactions between teachers and different stakeholders in education. In my research I use socio-cognitive theory as the underlying theoretical approach to interactions where I explore personal- and environmental factors and how they influence our behaviour. In addition I use Bronfenbrenner's socio-ecology theory as my analytical tool for understanding interactions. Data for this part of my study were collected from April to July 2016 through semi-structured individual-, pair- and group interviews. Forty two interviews were conducted in total, ten at each school, in addition I interviewed the District education manager and the Director for basic education at the Ministry of Education, Science and Technology in Malawi, with 123 participants in total. Participants include four head teachers, 24 teachers, four primary education advisors, 19 parents, 20 local leaders, 17 members of Parent teacher associations, 16 members of School management committees, and 17 members of Mother support groups.

Main findings indicate a level of mistrust towards teachers from stakeholders whether they are parents, the community or primary education advisors. This mistrust is displayed in a strong conviction in the

necessity of monitoring for instance teachers' performance, punctuality and treatment of learners. Teachers are presumed to be prone to laziness and not working hard enough. It may be concluded that there is a substantial need to bridge the relationship between teachers and stakeholders in education in those four rural primary schools in Malawi.

Keywords: Stakeholder's attitude, lazy teachers, monitoring teachers.

CHALLENGES CONFRONTING KINDERGARTEN TEACHERS IN THEIR FIRST YEAR OF TEACHING

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Abstract

Novice teachers' first year in the teaching field is a year of great expectations and anticipation, but it also engenders anxiety and lack of confidence. Research has addressed novice school teachers' induction processes, indicating that this first year represents a period of challenges, dilemmas and difficulties. However, little has been written about the first-year experiences of novice kindergarten teachers.

This research examined the novice kindergarten teacher's dilemmas and challenges during this critical first year and their attitudes towards the professional development workshop, relating to the relevance of the workshop in assisting the kindergarten teachers in coping with the dilemmas that arose from the field. The findings indicate that the novice kindergarten teachers experience similar dilemmas in their first year in the field to those experienced by school teachers. It was also found that the workshop was not a significant factor in helping the novice kindergarten teachers cope with this challenging experience. It is concluded that it is necessary to re-evaluate the workshop framework to make it a place of significance for the novice kindergarten teacher.

Keywords: Novice kindergarten teachers, kindergarten teachers' training, induction year.

HOW IS BULLYING PORTRAYED IN A COLLECTION OF SELECTED PICTURE BOOKS? A CONTENT ANALYSIS

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Abstract

Bullying is unwanted, aggressive by another that may inflict harm. It is a serious problem for children, adolescents, and young adults. It starts in preschool, increases in elementary school, peaks in middle school, often continues into high school, and is considered the most prevalent form of youth violence. Bullying crosses different cultures. No matter age or culture, bullying can result in long-term harm to individuals. This study shares findings from a content analysis of how bullying is portrayed across 126 picture books. Data collection focused on identity and characteristics of the bully and bullied, identity and portrayal of bystanders, and description of the context for bullying. Data analysis was qualitative, descriptive, and focused on constructing recurring patterns in the portrayal of bullying. Findings indicate that while males ranging in age from five to thirteen-years-old were predominately portrayed as bully and bullied with focus predominately on the bullied. Bullying was portrayed as repetitive, not a single act, and school as the common context for bullying.

Keywords: Picture books, bullying, research, portrayal, content analysis.

STRUCTURAL AND CONTENT TRANSFORMATION OF THE VOCATIONAL TRAINING SYSTEM IN HUNGARY AFTER 2010

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Abstract

It was a priority in the programme of the government, which took office in 2010 (and has been in power ever since), to transfer the vocational training system and to introduce a dual vocational training system in order to create competitive vocational education and training. The reasoning behind this was understandable and generally known: the lack of well-trained workforce was one of the major obstacles in the way of the establishment of large foreign companies and also the development of domestic small and medium-sized businesses in Hungary. A significant milestone during the transformation process starting in 2010 was the adoption of Act CLXXXVII of 2011 on vocational training, which entered into force on 1 January 2012, and which created new ground for, and transferred the vocational training system that functioned earlier.

In my study the interventions in vocational education and training policy performed after 2010 and the process and results of the transformation of the vocational training system with special regard to the features of dual vocational training will be introduced and analysed through the major milestones.

Keywords: Vocational training, dual training system, transformation process, policy interventions.

THE ROLE OF TEACHING PRACTICUM ON THE PROFESSIONAL DEVELOPMENT OF MATHEMATICS STUDENT TEACHERS FROM THE CENTRAL UNIVERSITY OF TECHNOLOGY, FREE STATE

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Abstract

Teaching practicum forms the integral part of teacher training. This study explores mathematics student teachers' views on the role of teaching practicum on teacher professional development. Group interviews and a questionnaire were used to collect data. A total of 44 senior mathematics students undergoing six months teaching practicum participated in this study. Results indicate that, overall, mathematics student teachers at the Central University of Technology regard teaching practicum as an essential contributor to their professional development and preparation for work expected of them in South African secondary schools. Participants also identified some concerns, such as the way micro-teaching is utilized to prepare them for teaching practicum. The paper provides suggestions to improve the identified areas of the practicum offered by the Central University of Technology.

Keywords: Student teachers, teaching practicum, professional learning and development, micro-teaching.

THE MATHEMATICAL SKILLS AND TIME AVAILABLE IN STANDARDIZED TESTS

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Abstract

The research project sets out to investigate the influence of the "time available" variable in the performance of INVALSI math tests in Italian students of secondary school. The INVALSI tests are standardized tests, based on articulated and rigorous procedures, for Italian school students. Evaluation of students' performance through INVALSI tests is mandatory by law (Article 51 paragraph 2 of the Decree-Law of 9 February 2012, No. 5 converted into law No. 35). The tests are elaborated by the National Institute for the Evaluation of the Education and Training System (INVALSI), a public law research body of the Ministry of Education, University and Research (Miur). The purpose of the tests is to draw a statistical reference framework on the level of learning in Italy. With the INVALSI tests it is

possible to monitor the national education system and compare it with other European institutions. The INVALSI Test carried out at the conclusion of the Third-Degree State Examination of lower secondary school was an instrument for the certification of the students' learning (Fondazione Giovanni Agnelli 2014, p. 68). A study of 2011 (Chamberlain, Daly, Spalding), aimed at exploring the causes that trigger the examination anxiety, highlighted the importance of time available to complete the test among the causes. The time allotted to carry out a test or, in any case, the perception that students have of it can therefore be an element to be taken into consideration because it could alter the measurement of learning. Specifically, the survey aimed to perform a statistical analysis of the performance results of a sample of 137 students when the time variable varies. In particular, we wanted to establish if the time variable influences a different expression of skills. In first analysis it would seem that the time factor does not have direct consequences on students' performances, but Rasch analysis has shown that the time difference granted to students influences the emergence of students' skills in relation to the different difficulty level of each item of the math test. Finally, the survey describes the influence of the variable "luck" in the results of standardized evaluations.

Keywords: INVALSI, time, mathematics, secondary school, performance.

HOW INFORMED ARE OUR EDUCATORS? A SURVEY STUDY ON THE AWARENESS OF SCHOOL BULLYING AMONG PRIMARY THROUGH HIGH SCHOOL TEACHERS IN CHINA

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Abstract

School bullying is undoubtedly a worldwide problem; it can be observed among children and adolescents all across the globe. For the past few years, it has become serious in China as well and consequently received great attention. Even the Chinese government has recognized this and recently issued a document that specifically defined school bullying and suggested coping strategies. From an environmental perspective, teachers play a crucial part in the prevention and control of school bullying. By investigating eleven schools in Shaanxi province through interviews and questionnaires, this study focuses on the awareness as well as knowledge about school bullying among Chinese high school, middle school bullying is still vague. Because they are generally incapable of recognizing common bullying and least knowledgeable about cyber and verbal bullying. The levels to which they are informed varies according to location (i.e., urban versus rural), grades taught, and educational background. Therefore, policy publicity and teacher training should be strengthened to improve the accuracy of teachers' awareness of school bullying.

Keywords: School bullying, primary through high school teachers, awareness.

INVESTIGATING FIRST-YEAR PHYSICS STUDENTS' CONCEPTUAL UNDERSTANDING OF VECTORS

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Abstract

The paper reports the findings of the investigation conducted on first-year B.Ed. (FET) Natural Science physics students at University of Technology (UoT), in the Free State Province, South Africa. The aim was to assess their conceptual understanding and knowledge of vectors and to identify possible misconceptions. Physics is compulsory to all first-year B.Ed. (FET) Natural Science students at this UoT. This was an exploratory study conducted among first year physics undergraduate students, in which vectors was identified as a problem area. The instrument used to collect data consisted of questionnaire made of multiple choice questions on vectors. A pilot test of this questionnaire was administered to about

30 students in 2014. For validity and reliability of the questionnaire, fellow academics were employed. A questionnaire was thereafter administered to a willing 187 first year physics students in 2014 and 2015 in the pilot study. The responses of the participants were analysed for patterns and trends statistically, to conclude this study. The performance by the students in the questionnaire was low. The results therefore indicated that the students do have problems with the conceptual understanding and knowledge of vectors in physics. Their responses were analyzed by coding and categorizing. Results indicated that the students do have problems with conceptual understanding and knowledge of vectors in physics. These problems are influenced partly by the common-sense knowledge that the students possess about science concepts and which seems to clash with the scientific knowledge presented in their physics classes. The conclusion deduced from this was that first-year undergraduate physics lecturer need to identify and rectify misconceptions by their students and therefore use different science teaching strategies to overcome this.

Keywords: Conceptual understanding, scientific knowledge, vectors, teaching strategies, physics, misconceptions, patterns and trends.

EFFECTIVE PROVISION OF FEEDBACK ON ASSIGNMENTS FROM A LARGE CLASS

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Abstract

Program Design, Data Structures and Algorithms is a basic yet popular module in the higher education of computer science discipline. The module encompasses rather diversified topics such as program design, abstract data types, stacks, queues, and priority queues. The yearly average of students enrolled this module in our university is about 160 and their achievements are normally assessed through two equally weighted attainments: a course work assignment and a 2 hour exam. The assignment consists of studies about selection and the design of proper data structures such as queues, and priority queues for the compression of a given text file using Huffman encoding scheme. The students are also required to write a report on how the encoding scheme is implemented. The assignment is usually released in early November and the students are required to hand in their reports by early December.

Timely provision of feedback has been found crucially important to help improve student's learning experience and ultimately to enhance their overall learning performances. Assistances to help early identification of issues, such as their abilities for grasping and applying the relevant and appropriate knowledge for solving the given problem; the provision of guidance for revising relevant contents; and encouragement for further developments through early planning of the present study as well as future modules, have been found to keep the students on the right track rather effectively. Subsequently, the positive progress of the study also encourages the students to learn further. Equally important to the success of the module is the appropriate marking scheme which requires careful calibration of grades and to apply the marking criteria consistently across a large class.

In this paper, we report a study on the effectiveness and efficiency of how the feedback is given to the students through a modern marking software. Four different ways for providing feedbacks have been deployed: (i) detailed written feedback on each assignment, (ii) general written feedback, (iii) detailed written feedback on request, and (iv) face-to-face detailed oral and interactive feedback. The end results have been evaluated through the following four methods: module questionnaire, module moderation report, feedback from external examiner and also through departmental examination board. A comparative study of the module over the last three years shows that a combination of the latter three is more effective and more appreciated from the student's perspective. The findings may be potentially suitable for teaching such large classes as Professional Issues in the Computing Industry.

Keywords: Computer science module, large class, programming, module assessment, effective feedback provision.

THE BILINGUAL TEACHING METHOD IN ELEMENTARY SCHOOL: A CASE STUDY AT "RAFFAELLO SANZIO" ELEMENTARY SCHOOL IN TRENTO

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Abstract

My PhD project is an empirical qualitative research aiming at gaining a better understanding of how the bilingual teaching works. The most revolutionary approach to bilingual education in Italy is the Content and Language Integrated Learning (CLIL). The actors of this research are the pupils that will be attending the fifth grade at "Raffaello Sanzio" elementary school in Trento, Italy, the academic year 2018-19. The bilingual teaching project has been successfully proceeding there for over ten years; therefore, I strongly believe that it is worth exploring how and to what extent they are achieving the required level of content, and what can be done to improve those results.

In order to gather reliable qualitative data, I am going to employ several ethnographic research methods including classroom observations, digitally recorded videos, paired with interviews of the pupils, their parents, and their teachers. The perspectives of all these actors are crucial for establishing an ethnographic understanding of the context in which this pilot program was created and continues to function.

This doctoral research project seeks to add to the body of knowledge by focusing on the perception of the children regarding the bilingual project they have been participating in for the past five years and their accomplishments in English and the other subjects taught in English. Out of the six subjects that are taught to pupils through a foreign language (L2), namely in English – Mathematics, Science, Art, PE, Cross Curricular, and Geography – I will focus on three of them, that is Mathematics, Science, and Geography. This is because, on the one hand, they are generally considered difficult even in the pupils' first language (L1). On the other hand, because the evaluation of these three combined with the evaluation the level of English acquired in the 5th grade is sufficient for understanding the function of the CLIL teaching method (Contardi and Piochi, 2002). Besides, the evaluation of the other three subjects, i.e. Art, PE, Cross Curricular, require a different set of research methods given that they use movements, drawings and interdisciplinary activities.

Keywords: Education, bilingual teaching, elementary school, CLIL, English.

A PATH OF SUBTLE CHANGE

A Qualitative Study on the Process of Self-regulated Learning in Classroom Situation

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Abstract

Intensive efforts of educational reform in China has captured wide attention in the Chinese society to the cultivation of students' core quality. "Learning to Learn", as one of the standards of core accomplishment, becomes an important objective for education. Therefore, Self-regulated Learning (SRL) has become a heated topic in education research. For a long time, most studies on SRL appeared in the field of educational psychology, such as the study on the influence factors of SRL; the correlation analysis between self-efficacy and academic performance. However, the process of SRL in classroom situation and learning cycle analysis still remains to be further studied. This study applies the grounded theory methodology to study on the process of SRL in classroom situation. The author establishes a theoretical framework of SRL in classroom situation, which includes three dimensional classifications: the type of classroom learning situation, the stage of process of SRL and the degree of autonomy of SRL. From the perspective of social cognition theory, the author further took a micro analysis on the students' SRL process in the three classroom situations, including problem interaction situation, cooperative learning situation and task management situation. This study finds that the SLR in real classroom situation is related to the students' preference to the types of classroom learning situation; It is influenced by the interaction of individual, behavior and social situation; It is a gradually changing process, from "want to learn", "be able to learn "to "keep learning".

Keywords: Self-regulated learning, classroom situation, social cognition theory, degree of autonomy.

TEACHERS AS HACKERS- IMPLICATIONS FOR $\mathbf{21}^{\text{ST}}$ CENTURY TEACHER EDUCATION

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Abstract

Today's education systems are struggling- struggling to stay relevant in a constantly changing world, struggling to offer a model for 21st century teaching and learning and for reaching social goals such as equity. Previews change efforts demonstrated that the future of schools is in the hands of teachers- they are the once that should and can influence education systems from within.

A qualitative study explored the characteristics and circumstances of public school teachers from Massachusetts who act innovatively in their classroom and create pedagogical change. The findings indicate that those teachers act as "hackers"- they are passionate, they are reflective, and they accept or even invite uncertainty. In addition, teacher who act as hackers are willing to take risks, they utilize existing resources and use technology to serve their pedagogical goals.

The presentation will include the results of the study as well as insights and recommendations regarding teacher education programs and the ways in which they can help future teachers acquire relevant habits of "hacking". Those include skills as reflecting about pedagogy, critical thinking, collaboration, lifelong learning and risk taking.

Keywords: Teacher education, innovation, hacking, change, technology.

THE FIRST TEACHING EXPERIENCES OF PRE-SERVICE COMPUTER SCIENCE TEACHERS

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Abstract

International efforts and initiatives regarding increase the efficiency of computer science (CS) education have raised during the last ten years. In the literature, it can be seen that the effectiveness of different methodologies and technologies used in CS education have been investigated by researchers. Especially, after Wing's (2006) article in which she focused on the concept of computational thinking and defined it as a vision for CS educators, interdisciplinary education approaches were integrated into CS education methodologies. Today, the role of CS teachers became more important than before because of the new interdisciplinary content and hard-to-achieve outcomes such as the development of children's computational thinking skills. Pedagogical qualification, technological expertise, and high-level communication skills can be listed among some important competencies expected from CS teachers. Giving practice-based feedbacks to pre-service teachers is important for them to be able to have these vocational qualifications before graduation. The "Teaching Practice" courses of Education Faculties includes intensive in-class educational practices and feedbacks. Hence, in this study, the researchers were focused on the evaluation of pre-service CS teachers in a "Teaching Practice" course. The study was carried out in Yildiz Technical University, Department of Computer Education and Instructional Technologies. The senior students of the department gave lectures at secondary school level for 2 hours a week, during 11 weeks as total. The first teaching experiences of 15 pre-service CS teachers were evaluated with a rubric including 28 items divided into 3 sections. The sections of the rubric were "Planning", "Education" and "Communication". The results of the observations presented in the study and suggestions were made about the features that pre-service CS teachers should develop.

Keywords: Computer science education, teaching experience, pre-service teachers.

PROJECTS AND TRENDS

ONLINE VIDEO IN COMPUTING CLASSES IMPROVES THAI STUDENTS' ENGLISH

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Abstract

The research investigated whether the innovation of online video media spoken in both Thai and English with subtitles improved English skills for new students in Business Computing at Suratthani Rajabhat University. Ninety-two students were split equally between an experimental group using video online media for learning and a control group learning the same content face to face in the classroom. Evaluation was conducted through achievement and satisfaction tests. All students using the video online media passed the achievement test standard but only half of the control group passed. Comparison of results of the two groups showed no significant difference between the pretest scores while the experimental group had a significantly higher average posttest score than the control group. The achievement test results of the experimental group were significantly higher than the Control group in every English skill. The students' satisfaction was at a high level overall, they were satisfied with the innovation, found it interesting and easy to understand.

Keywords: Online video, cloud computing, English skills, online learning.

USING SPEECH RECOGNITION TRANSCRIPTION TO ENHANCE LEARNING FROM LECTURE RECORDINGS

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Abstract

This paper explains how speech recognition captioning with collaborative editing provides affordable transcription/captioning of lecture recordings, supports inclusive learning and enables universities to comply with the law. It considers how lecture recordings can be inclusively enhanced and what features in a lecture recording system would be beneficial for disabled students. The paper provides evidence that speech recognition can be more accurate than human transcribers and that students can collaboratively correct caption errors when commercial manual captioning is too expensive for universities.

Keywords: Speech recognition, transcription, captioning, collaborative editing, lecture recording.

A COMPARATIVE STUDY OF ONLINE AND TRADITIONAL FORMATS FOR LANGUAGE, LITERACY AND CULTURE

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Abstract

Online and blended coursework continues to be at the forefront of trends in education. The economic impact of online education is significant and dramatically contributes to institutions of higher education. Teacher educators of English Language Learners (ELLs) also express interest in face-to-face traditional classrooms with discussion and active learning in an engaged classroom setting. Numerous traditional programs and online opportunities support teaching of ELLs reinforcing self-directed learning strategies.

The pedagogical potential to enhance teaching and learning for linguistically diverse students is central to the goals and objectives of course design and implementation.

This study will compare two groups of graduate level teacher educators enrolled in the same Language, Literacy and Culture course. This course is required to obtain a teaching endorsement in Bilingual Education or English as a New Language in the State of Idaho, USA. Group A will participate in an asynchronous completely online platform utilizing Blackboard software. Group B will be enrolled in a traditional face-to-face setting that meets in a weekend format. The graduate students are self-selected by enrollment choice and cannot be randomized. The course assignments and requirements will be similar for each group of students. The intent is to focus on three domains impacting this side-by-side comparison. These include the ability to establish and maintain informal communication among the students and professor, the impact of spoken verbal components, and the differences in assessment levels. Specific aspects will be analyzed including the question and response components between the two groups and the types and level of participation in peer group settings. Although online blogs and discussions can be monitored, how does this compare with the face-to-face group of students? Clearly, this study will be impacted by the comparison points identified. Although similar assignments and assessment tools are incorporated, observation of interaction between students in peer group settings will be impacted. This study will include a discussion of the design, content, and implementation techniques for online and face-to-face course development and delivery, as well as student performance and outcomes on assignments. It is crucial to leverage exemplary pedagogy, capturing and sharing cutting-edge experiences that lead to quality courses and student success in language acquisition.

Keywords: Online, face-to-face, comparative study, pedagogy, language acquisition.

THE EXPANSIVE LEARNING THEORY AT THE SERVICE OF PARENT-TEACHER COLLABORATION

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Abstract

A plethora of studies link parent-teacher collaboration to children's learning and persistence in school. To be collaborative, the relationships between parents and teachers must meet the information, support and training needs of families so as to promote parental involvement as well as take into account their socioeconomic differences. The relationships can be very complex especially in the context of learning assessment practices. Since the implementation of the competency-based Quebec Education Program back in 2001, confusion persists with many parents. With the intention of gaining deeper understanding of the challenges parents and teachers face, we propose to revisit our most relevant study findings. This article seeks to show the value of Theory of Expansive Learning grounded in the Cultural-Historical Activity Theory (CHAT) (Engeström, 2007) that focuses on new forms of learning and social practices. Contradictions are identified and analyzed in the two interacting activity systems, the parents' and the teachers'. They provide a stimulus in helping us to reframe our representation and to guide us in the transformation process that then requires boundary-crossing actions. The Change Laboratory Method is thus introduced as a means that involves the intervention research team and stakeholders active in the problem co-modeling solution process. We hypothesize a two activity systems cross-boundary model in modeling a new solution. Sharing a common object like improving teacher parent collaboration is key to break away and overcome the tensions to cross boundaries together and achieve the targeted outcome ie student's success.

Keywords: Expansive learning theory, cultural-historical activity theory (CHAT), parent-teacher collaboration, learning assessment, change laboratory method.

ENTROPY AND DIFFICULT CLASSES. ANALYSIS IN MAIN COMPONENTS OF THE QUALITY OF SCHOOL LIFE IN CLASSES WITH ADHD STUDENTS

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Abstract

Entropy is understood as the measure of the lack of detailed information about a system, it is also associated with the concept of disorder. This paper sets out a survey for the assessment of entropy in the school context, considering the class as a high entropy risk environment, especially in the classes where there is the presence of children with ADHD (Attention Deficit Hyperactivity Disorder) or with behavioral disorders serious. In this perspective, in order to analyze the structural entropy and individual entropy of teachers, a Principal Components Analysis was conducted on the data collected through the administration of two questionnaires (the QUEI-s and the QUEI-p), on a sample of 150 preschool, primary and secondary school teachers. The results here exposed concern only the first of the questionnaires and have shown that the variables that contribute significantly to the explanation of the phenomenon are above all the number of students, the inefficient structure of the classrooms and the presence of rules.

Keywords: ADHD, entropy, class management.

THINKING OUTSIDE THE CLASSROOM: ENGAGING YOUNG PEOPLE IN LEARNING THROUGH 'NOT-SCHOOL' PROGRAMS AND PEDAGOGIES

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Abstract

The well-known phrase of 'thinking outside the box' is a metaphor referring to the process of viewing things differently, from new perspectives, or in an unconventional way. It has become a shorthand way of describing innovation and creativity in finding solutions to problems. In relation to 'the problem of education' this same metaphor of thinking outside the square can be applied to thinking outside the classroom, and even outside the school. Compulsory schooling is seen as a basic responsibility of civil society, yet for many adolescents it can be a narrowly defined experience which limits them inside the box. Alternative learning programs that engage young people and offer educational opportunities in which they are able to contribute agency and learn for their own sake, not just for learning's sake, are well documented and include an emerging field of educational provision labelled Not-school: learning that is generally non-formal or informal, yet contributes to re-engagement, skill development and increased motivation for young people that can be ends in themselves, as well as creating pathways into formal learning and/or further education. Not-school programs are literally outside the box; outside the boundaries imposed by traditional compulsory schooling. This paper describes the Not-school trend with examples of educational initiatives and practices that contribute to the schooling of children and young people, yet do not occur within the physical boundaries of the classroom and school, often not even delivered by qualified teachers, and in many cases engaging young people through creative, innovative and entrepreneurial methods.

Keywords: Not-school, engagement, youth culture, alternative learning programs, innovation and entrepreneurship.

AUDIO DESCRIPTION FOR INCLUSION. LISTENING COMPREHENSION AND ABILITY OF EMPATHY IN PRIMARY SCHOOL CLASSES

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Abstract

Audio Description (AD) is a narration service to make audiovisual content accessible for all. AD plays a facilitator role of educational settings in terms of inclusion and learning, accounting for the learning context a pedagogical tool directing the didactic intervention towards meeting the needs of everyone, without exception. Starting from this perspective, the paper presents quantitative and qualitative research aims to evaluate listening comprehension Ocelot's animated film *Kirikou and the Sorceress* (1998). In 9 primary classes for a total of 172 students feature film was shown in three different modes: 1) standard mode with AD, without video; 2) integrated use, standard mode with AD; 3) standard mode without AD. Upon conclusion on listening of each phase, the students have been provided with: 1) questionnaire with the aim of evaluate the film's storytelling understanding; 2) group interview in order to know the real ability of students to understand through listening. Data analysis shows that the different modes of audiovisual enjoyment have allowed the classroom setting to live an unusual learning experience aimed at promoting, through the empathy and multisensoriality, inclusion at school.

Keywords: Inclusion, audio description, school, listening comprehension, learning.

INTERNATIONAL TELECOLLABORATIVE PROJECT-BASED LEARNING FOR CULTIVATING GLOBAL COMPETENCE

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Abstract

The current wide availability of social media and cloud-based collaborative tools make it possible to have project-based collaborative learning among students regardless of their geographical locations. The benefits of such technology-mediated collaborative learning (i.e., telecollaborative learning) have been well discussed. International communication and collaboration skills are essential competence to acquire today, and so is global competence and cultural awareness. Although the importance of fostering such competences has been discussed in various literatures, rarely discussed is the actual method to cultivate it. There are many issues need to be considered with regards to international project-based collaborative learning, especially when that is conducted involving more than one class/institution. In this paper, the authors' observations and the results of trials and errors in the ongoing joint class project in the past 10 years which connects students in Japan and students in Hungary are shared. In this joint class project, students who enrolled in Introduction to Media Communication at Kanda University of International Studies (KUIS), Japan, and students who enrolled in Japanese Studies at Karoli Gaspar University (KGU), Hungary, form small groups and collaborate to create a presentation on a topic of their selection which intends to compare and contrast Japanese and Hungarian cultures and societies. The Japanese students and Hungarian students communicate and interact with one another in Japanese as well as English when necessary, using Facebook, Facebook Messenger for communication and networking as well as Prezi and Google Drive for collaborative thinking and authoring mutually negotiated and accepted knowledge products (presentations). The final products of the student-centered international collaborative project are online presentation slides with students' audio narration. For the goal of creating such a presentation, students brainstorm, discuss, exchange information, and collaborate among group members at a distance. There are many aspects in the project that have the potentials for assessing individual student's performance as well as group performance. The instructors assessed student performance in the project in the following three constructs: 1) the level of participation of the student in the project manifested in the number of online postings that are observed by the instructors, 2) the quality of the final

product evaluated by the instructor as well as the peer students, and 3) the depth of reflection articulated in the essay assigned at the end of the project. The paper describes the authors' 10-year experience of the international joint-class project and makes several recommendations to be considered for those who are planning similar international telecollaborative projects.

Keywords: International joint class, international telecollaboration, project-based learning, global competence.

OPEN CONTENT, OER REPOSITORIES, INTERACTIVE TEXTBOOKS, AND A DIGITAL SOCIAL PLATFORM: THE CASE OF GREECE

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Abstract

Open digital educational content is a key priority of the Greek national K-12 educational policy. "*Digital School 1*" national initiative (2010-2015) resulted in 7,500 Open Educational Resources (OERs); 100+ open, interactive textbooks; a modern digital repository infrastructure (*Photodentro*) for hosting, organizing, and sharing K-12 OERs, along with a national educational content Aggregator service and portal for harvesting and providing seamless access to externally hosted OERs; and a social educational platform for pupils and teachers (*e-me*). The paper presents the current status in Greece regarding K-12 digital educational content and e-services, in line with the Greek K-12 digital policy, and the new nation-wide program "*Digital School II*" (2017-2018) that extends and upgrades the current infrastructure.

Keywords: OERs, K-12 digital educational content, national strategies, repositories, digital platforms.

COLLABORATIVE ONLINE INTERNATIONAL LEARNING

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Abstract

The State University of New York's COIL program (Center for Collaborative Online International Learning) offers faculty training that models characteristics of quality online learning environments. Training sequences learning activities, moving from socialization, to comparison and analysis, to collaboration. Reflective activities are infused throughout. By applying this approach, courses linking students from different countries have successfully fostered awareness of new cultures as well as heightened awareness of one's own.

Keywords: Online, international, collaborative learning.

COUNTRIES AFFLICTED BY VIOLENCE AND ANOMIE IN NEED OF A REVISED APPROACH TO CITIZENSHIP EDUCATION

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Abstract

Many countries around the world suffer from violence and anomie. South Africa is no exception. It is argued that while Citizenship Education should have an international or global aspect in view of the fact that most individuals have today become world citizens, it should also contain materials that would help

learners / students to be formed in such a manner that violence and anomie could be eradicated in their respective home countries. Moral education should be pertinently and more comprehensively included in school curricula, particularly in the more advanced grades. Measures should be taken to keep as many children in school in order for them to be exposed to moral education offered as part of Citizenship Education.

Keywords: Anomie, citizenship, citizenship education, moral education, globalisation.

PROMOTING MOBILE LEARNING THROUGH THE ESTABLISHMENT OF A MOBILE LEARNING COMMUNITY

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Abstract

With the fast development of mobile technologies, mobile learning has been adopted by more and more students and staff in higher education institutions. This paper reports on a project which aimed to promote mobile learning in higher education. In order to find out students' and teachers' experiences and perceptions about mobile learning in a tertiary institution in Hong Kong, over 100 students and around 50 staff members across different disciplines were surveyed online, and follow-up interviews were carried out with 35 students and 11 staff. The research findings suggest that both students and staff were generally positive towards mobile learning as around 75% of the respondents from both groups thought mobile learning should be encouraged in subject learning and teaching. Most of them agreed that mobile learning could provide an adaptive learning environment as mobile technologies are commonly used in teaching and learning in the 21st century. Moreover, many were actively engaged in creative use of mobile technologies in assisting learning and teaching, believing that the use of mobile technologies to support teaching & learning would become a trend in the coming future. In the survey, the students stated that the lack of training on learning apps was the biggest obstacle to the use of mobile devices in learning. Based on the findings, students and staff were invited to form a mobile learning community and share their mobile learning or mobile-assisted teaching experiences through various activities, such as writing app reviews, compiling mobile learning e-portfolios, participating in sharing sessions and offering seminars about mobile learning. To facilitate sharing among community members, a website titled 'Mobile Learning @ EdUHK' has been created to showcase tertiary students and teachers' good practices in mobile learning and teaching. A variety of resources have been featured on the website, such as video clips of public seminars about mobile learning, mobile learning App reviews, mobile learning e-portfolios, and useful links for mobile learning. The challenges and solutions of creating and maintaining a substantial Mobile Learning Community (MLC) will be discussed. It is hoped that our study will shed some light on how mobile learning can be promoted effectively in higher education institutions.

Keywords: Mobile learning, mobile learning community, higher education, Hong Kong.

CHALLENGES FACED BY FEMALE LEARNERS FOLLOWING AN ENGINEERING CAREER IN SOUTH AFRICA

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Abstract

The objective of this study is to examine the specific problems that arise in a society with patriarchal attitude toward women and their choice of a future career. Within the University of South Africa (UNISA) the College of Science, Engineering and Technology (CSET) started in 2009 a community outreach programme (The GirlPower programme) whereby once or twice a year, female learners from the high schools in the Johannesburg and Pretoria area, are invited to a workshop where the engineering

choice of career is discussed. To understand better the hurdles faced by the female learners while choosing an engineering career, the authors carried out a survey among a sample of 74 future female engineering students, GirlPower (2017), currently part of the "GirlPower" group. It emerged that although 99 % of the female learners' enrolled for mathematics and physical science only 32 % intend to continue with engineering studies at tertiary level. The big problem is parental and society attitude toward a female child being "able" to study engineering. In a previous study done in 2010 on a sample of 418 university engineering students, Ionescu (2010), a staggering percentage of 84 % of male engineering students would not send a female child to study engineering, 82 % of schools did not offer any other engineering orientated subjects leading to 64 % of the students having difficulties understanding engineering modules at university level, and most worryingly 42 % of the engineering students did not have access to a computer in high school. Seven years down the line the situation worsened with 46 % of learners being computer illiterate after high school. Based on a survey conducted among engineering companies, Ionescu (2011), an inexplicable picture emerges. Looks like our female engineers just "disappear". Although the engineering female graduates represent about 21,5 % of the total engineering graduates, in a large company with about 20 000 employees only 3480 are female and not one single female engineer. The current survey, GirlPower (2017), shows a relatively black picture of the future of female engineers even if the schools in Johannesburg and Pretoria area are considered to be among the best in the country. 58% of learners did not get a science kit in high school, in 64 % of the cases only the teacher is allowed to perform science laboratory experiments and 77 % never heard of virtual laboratory experiments. Based on the present survey the authors will attempt to suggest some solutions to the problems faced by female learners.

Keywords: Female learners, engineering career.

SCIENCE TEACHER DEVELOPMENT IN A GLOBAL WORLD: A STUDY CENTRED IN MASTER DISSERTATIONS IN ANGOLA

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Abstract

This study is based on the assumption that to teach science nowadays implies to contribute to pupils/students' behavioral changes for promoting a better world in the perspective of a sustainable development (at the environment, social and economic domain). This implies to take into considerations in teachers practices educational international agendas, such as the Millennium Development Goals (2000-2015) and/or the Sustainable Development (SD) Agenda 2015-2030 of the United Nations, and local ones (e.g. MEA, 2008, 2014). One condition for *glocalization* through education to occur is to have high qualified science teachers, in particular those who continue their initial training, for example by doing master degrees. However, this post-graduation formation needs to incorporate the challenges which arise from those political and institutional agendas.

The general aim of this study is to investigate how the Master Course in Science Education (2nd edition), developed in one public Institution of Teacher Education in Angola between 2011-2016, contributed towards teachers' empowerment to integrate in their teaching practices knowledge, strategies and resources associated to the international and national political educational agendas referred to above. The association of these agendas (international and national) should be seen in alignment with a *glocalization* strategy to be incorporated in science teaching.

The empirical study reported here consists in the documental analysis of 27 master dissertations, approved between 2014 and 2016 in the scope of the Master Course mentioned. This analysis has been supported by a framework, build by the authors in which the following documents have been taken on board: (i) the Millennium Development Goals (2000-2015) & the United Nations Sustainable Development Agenda 2030 (with its 17 SD Goals), (ii) the Continental education strategy for Africa 2016 – 2025, (iii) the national educational agendas (MEA, 2008, 2014) and vi) the research agenda of the

Institution responsible for the ministration of the academic teacher development program under research. Broadly speaking the results show a need to re-orientate the topics under investigation, as well as the contributions given, in order to better integrate the agendas referred above, and therefore to promote an education for sustainability in its diverse dimensions.

Keywords: Science education, teachers development programs, sustainable development agenda 2030, masters courses in Angola, documental analysis.

CITIZEN SCIENCE: TAKING OFF, TAKING ON, TAKING OVER

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Abstract

Citizen science has been variably described within the literature ranging from 'enlisting the public' to 'non-professional scientific engagement' in research projects such as animal sitings, crop condition reporting, and illness incidence. Regardless of the description, the use of citizen volunteers in a range of research activities (collection, data processing, analysis) has been widely described and debated. In this presentation we highlight the potentials for citizen science to be an educational intervention which not only enhances individuals understanding of their context, but engages them in global issues such as climate change, food security, and health literacy. A number of exemplars and models for citizen science education and development will be address, with consideration of needs of both the citizen and the scientist. Initially, we launch the discussion (take off) by providing a brief history of the citizen science movement reflecting on how past experiences have yield demonstrable positive impacts and generated educational, attitudinal, and behavioural change in those involved. Secondly, we will challenge (take on) the citizen science models, which have tended to limit the involvements to minor roles; hence yielding missed opportunities to fully enjoy the educational benefit of the citizens and the project. Finally we will explore an application (take over) of citizen science featuring a participative framework which describes a project with a pastoralist community in Tanzania using this approach to build skills, share knowledges, and ultimately lead the scientific process to answer necessary and pressing needs within their context.

Keywords: Citizen science, pastoralists, rural education, educational inclusiveness.

NEW CONTEXTS OF FOREIGN LANGUAGE LEARNING AT THE UNIVERSITY: MICROLEARNING AND SOCIAL NETWORKS

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Abstract

The paper deals with the topic of supporting the processes of foreign language learning by means of mobile devices. The conceptual framework is provided by the phenomenon of "microlearning", which represents one of the current global educational trends, observable especially in the area of corporate learning. With regard to this particular theoretical perspective, the author presents the outcomes of the two-year action research carried out within the area of English language courses taught in the university context. The analysis is focused on the use of the social network Instagram as the specific "microlearning" tool stimulating the processes of the students' language "microproduction". The empirical evidence comprises the students' Instagram posts, i.e. the "microblogs" related to their particular photographs, and it also includes the learners' subjective perceptions of the learning potential of the social network Instagram, collected by means of a structured questionnaire.

Keywords: English language teaching, microlearning, eLearning, mobile learning, Instagram.

OPEN BADGES – A NEW WAY TO DEMONSTRATE SKILLS AND LEARNING

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Abstract

Open badges are online representations of skills and accomplishments. Open Badge is an open standard developed by the Mozilla Foundation to recognize and demonstrate learning in the form of a digital image with embedded metadata. In Lahti University of Applied Sciences, open badges have been utilized as a more flexible and nuanced way of acknowledging the learning and skills of students and staff members. Lahti University of Applied Sciences has utilized open badges as a way of promoting staff competence and professional development. Open badges have been used to validate the pedagogical and digital expertise of teachers in a HR training program. Open badges can support the teacher in reflecting on their skills and teaching methods. Open badges help make the skill sets required visible and concrete with clearly defined criteria and detailed instructions on how to demonstrate the required skills. Using badges, teachers can then display and share their achievements online. The open badges can also help teachers recognize areas in which they need to develop their skills further. However, open badges are a new concept and there is a clear need to continuously communicate the idea and value of badges. Support has been organized by arranging training sessions linked to the skill sets represented by the open badges. Positive experiences have been gained from teachers making open badge applications in joint workshops and sharing best practices.

Keywords: Open badge, digital badge.

MANAGEMENT OF BEHAVIOR PROBLEMS OF CHILDREN WITH AND WITHOUT DISABILITIES: GREEK PARENTS' OPINIONS

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Abstract

The role of family is extremely important in child's social development and the parenting style can be either a protective or a risk factor (e.g. Earle, 2013). Specifically, according to previous studies, parents' attributions about child behavior problems and discipline techniques are considered to affect the development and persistence of conduct problems (Dix, 1993).

The purpose of the present study was to investigate parents' opinions concerning the use of behavior management strategies. Research questions of the study were (a) which strategies parents use for behavior problems management and (b) if there are differences concerning the use of behavior management strategies between parents of children with and without disabilities. Parent Practices Interview (PPI: Webster-Stratton, 1998) was used as an instrument in the particular study, in which 110 parents of children with and without disabilities have participated. The sample was randomly selected and came mostly from cities in Central and North Greece.

The results show that, in general, parents manage behavior problems mostly by using positive verbal discipline strategies, which is in contrary to previous study of Harman and Blair (2016) according to which parents manage behavior problems by stating clear expectations. Also, there seems to be no statistical significance concerning parenting practices between parents of children with and without disabilities, except for the subscale of appropriate discipline with parents of children with disabilities using more such strategies.

Keywords: Parents' opinions, behavior management strategies, children with and without disabilities.

#DISRUPTING#POSTSECONDARY#TEACHING

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Abstract

In early 2015, the Gates Foundation released the results of a survey that focused on educators' attitudes toward new teaching technologies and approaches. The results suggested that educators were aware of new developments in teaching, but that less than half implemented them in their classrooms (FTI Consulting 2015). Approximately 29% of respondents said that they had adopted a flipped classroom and 27% had used open source material to augment course content (FTI Consulting). A more recent Canadian research project identified that video was the most common tool used to transfer content and engage students in teaching and learning spaces (Squires, Turner, Bassendowski, Wilson, and Bens, 2017). So what does this mean for post-secondary educators? How are they to select from the palette of tools that are available and move them into their classrooms to support communities of learners (Bass, 2012; Bassendowski & Petrucka, 2015)? What criteria should drive the selection of tools and approaches? What should educators consider in terms of challenges and opportunities when it comes to using new teaching technologies and approaches? Classrooms are changing, the student body is changing, and pedagogical beliefs are changing. The diversity and digital connectedness of today's students have led many educators to take a critical look at ways to enhance, integrate, and/or disrupt the teaching and learning process because "...for disruptive innovations to flourish, they must be packaged in a way that delights customers" (Christensen, Aaron, & Clark, 2003 p. 31). This paper discusses the concept of disruption in teaching and learning as a method to connect and engage undergraduate and graduate nursing students in course content.

Keywords: Innovation, pedagogy, disruption, teaching, engagement.

PEDAGOGICAL EFFECTS OF ANIMAL-ASSISTED INTERVENTIONS IN CLASSROOM ENVIRONMENT

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Abstract

This study presents the pedagogical benefits of the classroom application of animal-assisted pedagogy and therapy. The first aim of our research was to develop a new set of pedagogical methods to aid the motivation and stress management of pupils in different types of elementary schools; in special educative environment, in normal and in inclusive classrooms. We focused on the effects of animal-assisted interventions on both the humans and the animals. Our methodology consisted of tests, classroom observations, case studies, and classroom interventions. According to our hypothesis, animal-assisted interventions decrease stress and increase learning motivation of first grade pupils to a large extent, and meanwhile, imprinted rabbits do not suffer any significant stress. For individual rabbits, there is a difference in terms of the time needed for gaining the necessary trust. There are differences in the explorative behavior of rabbits, too; and these determine their personality. The stress sensitivity of rabbits along with its change during the habituation procedure, can be determined based on their cortisol (stress hormone) level. Concerning rabbits, our main aim was to imprint them. We measured the degree of adaptive behavior, communication, social, and cognitive skills of pupils in the beginning of their school term and after a one-year interventional period, both for the animal-assisted groups and a control group. Based on our research, the development of the animal-assisted groups in their social and cognitive competences was significantly higher than that of the control group. In conclusion, by using animal-assisted methods, the development of emotional stability and learning attitude of students has significantly decreased the occurrence of different emotional disorders.

Keywords: Special education, animal-assisted intervention, classroom research, anxiety, learning motivation.

DEFINING COMPONENTS AND MEASURING OUTCOMES OF A HYBRID STUDY ABROAD PROGRAM

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Abstract

In the context of an increasingly global society, study abroad, at its best, is the strongest vehicle for driving global learning in preparing college students for the challenges in the 21st century. Despite of the controversy of short-term study abroad being as effective, this format of global learning is becoming the most popular and the fastest growing.

An overall literature review is conducted on history of study abroad in the United States. Recent facts and trends are investigated and explored.

Focused on the discipline of IT development, this presentation defines components and measurement instruments for developing and assessing a short-term hybrid program to its effectiveness. The misperception that a study abroad course is a 'travel course' is particularly addressed. Exemplary course components are identified for quality assurance. Concerns and disputes that have been scattered in the study abroad community are examined to raise awareness and to encourage a broader discussion.

The subject of this project is critical and significant in assuring quality delivery and assessment in short term study abroad programs in the related academic fields, such as IT business, development and management. Standard guidelines are reinforced incorporating with Intercultural Knowledge Value Rubric and Competence and Global Learning Value Rubric defined by AAC&U (Association of American Colleges and Universities).

Main components of the presentation consist of the followings:

- Literature review and facts of short term study abroad in general and in business schools
- Sample course contents/activities and students' projects
- Assessment pre/post questionnaires that can be easily adopted to other disciplines
- Results of pre/post assessment and analysis
- Four-Phase Study Abroad Assessment Chart for developmental continuum
- Discussions and recommendations

Keywords: Global learning, IT development, IT business, study abroad, assessment.

DEFINING TRANSDISCIPLINARITY

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Abstract

This article explores the concept of transdisciplinarity, primarily the challenges with its definitional clarity. It will center on the formation of a new degree program titled "Transdisciplinary Studies in Technology" at Purdue University. The first part of this article will analyze the results of an empirical study done by a marketing research firm, Simpson and Scarborough, hired by Purdue to gain insight into popular and industry opinions on the concept of transdisciplinarity. Data from this study largely suggests a confusion as to what is meant by this term. The second part of this article looks at the concept of transdisciplinarity from an academic perspective. The authors conclude that the concepts behind transdisciplinarity that make it powerful are the same concepts that make it so hard to define and communicate.

Keywords: Transdisciplinarity, education, systems theory.

DESIGN THINKING APPLIED IN HIGHER EDUCATION *D-Think*, a European Project for Innovating Educational Systems

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Abstract

As a response to continual social and technological transformations, many organisations call attention to the need for urgent changes to educational systems. Because of its collaborative and creative approach, its cross-disciplinary and human-centredness, Design Thinking is seen as a useful mindset and method to face the challenge of a new learning paradigm. Between 2014 and 2017, seven institutional partners from six different European countries developed the Research Project D-Think, supported by the Erasmus+ Programme of the European Commission. The goal of the D-Think project is the promotion of the application of Design Thinking as an innovation method to rethink not only learning/teaching methods but also pedagogical approaches, learning spaces or the role of educators. In this wider context an open access training course for HEI educators and VET trainers was developed, through which they can learn how to apply Design Thinking tools and how to get into its mindset. The methodological approach of the research process and the development of the *D*-Think course material was Design Thinking itself. By applying the DT model Evolution 6, the research team was led through the different DT phases, applying several tools of Design Thinking. The final outcome - the Toolkit and the Platform - were validated in three ways: 1. a "Train the Trainer" Course, 2. a Pilot Course with 104 participants, and 3. the D-Think Journey, a multiplier event with 272 participants. The feedback from these three activities showed that around 80% of the participants evaluated the course material as an effective support to try out and to learn the method of Design Thinking applied in an educational context.

Keywords: Design thinking, research, higher education, innovation, toolkit.

THE EHEALTH EXPERIENCE WITH POST-SECONDARY STUDENTS MAJORING IN HEALTHCARE DISCIPLINES ON A MOOC: OPPORTUNITIES AND CHALLENGES OF SELF-DIRECTED E-LEARNING FOR ESL LEARNERS

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Abstract

Having experienced the interactive components selected from an online MOOC course named "eHealth: More than just an electronic record" offered by the University of Sydney on the Coursera platform, post-secondary students majoring in healthcare disciplines in Hong Kong have been introduced to the concept of eHealth and its working language in Australia.

This paper would decipher the pedagogical implications brought forth by the juxtaposition of cultural divide and differentiated language abilities in learning the eHealth concept through studying the discussion threads within a MOOC (Massive Open Online Course). Also, it would outline the benefits and challenges faced by healthcare-majored ESL learners in the course of self-directed e-learning. The narrative inquiry approach would be adopted in soliciting students' first-hand responses in forms of focus group meetings. Primary data would also be collected through questionnaires and third-party observations.

It was concluded that the students concerned were able to direct their own e-learning, master the skills in writing commentaries on mobile apps about health informatics and critically evaluate each other's work online. The challenges of online learning faced by ESL learners will also be discussed.

Keywords: MOOCs, eHealth, self-directed e-learning, health informatics, discussion threads.

ARE ENTREPRENEURSHIP AND DIGITAL COMPETENCIES FALSE FRIENDS? A DESIGN THINKING CASE OF THE INTENSE E-TOOL

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Abstract

This paper roadmaps the creation of an e-TOOL for SMEs willing to internationalize, done within a three-year Erasmus+ project: International Entrepreneurship Skills Europe (INTENSE).

The e-TOOL is part of a hybrid course: it is to be linked to face-to-face, case-based entrepreneurship classes at the universities in the Netherlands, Croatia, Germany, Finland and Belgium.

Its specific challenges are to share tacit knowledge on doing business in other countries, to collect links to useful information on doing business in other countries and to share existing teaching material and case studies of SMEs that have internationalized.

To understand these challenges thoroughly the design thinking approach developed by IDEO and taught at the d.School of Stanford University was adopted. Empathy with the community's ways of thinking was gained in the INTENSE staff training week. Based on this experience needs and insights on a deeper level were formulated. In the ideation phase a draft concept based on Puentedura's model of technology-enhanced learning, the SAMR-model, was presented. It consisted of several ways of engaging and tapping into the international entrepreneur's wisdom linked to Puentedura's four steps in digitalizing courses: Substitution, Augmentation, Modification, Augmentation. Thus, the point of view was highlighted that to draw in entrepreneurs into the INTENSE hybrid course, the e-TOOL had to be digital and student-centered. Feedback was gathered during the project meeting in Utrecht. New insights emerged: the clash between design thinking and project management; the confusion between content- and competence driven education; the questions about lecturers and practitioners as knowledge resources. And of course, there were feasibility issues. Incorporating these concerns, a prototype was created in WordPress to be embedded in the final website and design cheat sheets were shared. The prototype was tested during events for academics and entrepreneurs in the partner countries.

Finally, the paper discusses the takeaway of this process linking the final INTENSE e-tool to the SAMR-model and the European Frameworks both for digital competencies and Entrepreneurship and Sense of Initiative competencies. As the European commission stresses that these frameworks should be used as languages, the linguistic concept of 'false friends' is selected as a metaphor for the final reflection. A false friend is a word that is often confused with another word in another language with a different meaning because it looks or sounds the same, according to the Cambridge Dictionary.

Keywords: Design Thinking, e-Tool, Digital Competencies, Entrepreneurship Competencies, SAMR.

WORKING TOGETHER ACROSS EDUCATIONAL LEVELS TO INCREASE STUDENTS' MOTIVATION

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Abstract

An analysis of the Degree in Primary Education course syllabus revealed that some skills had to be complemented in order to ensure the Education students' career success. The present study is based on "testing skills", one of the shortfalls identified as needing deeper training throughout the 4-year degree. There is no denying that the Education students have been testees for years, but they lack the tester's perspective (how to create, administer and mark tests). From the standpoint that assessment is a crucial part of teaching, students who will work as primary school teachers must, undoubtedly, get input and practice in testing.

The study was carried out at Florida Universitaria (private institution affiliated to the University of Valencia). This Higher Education institution offers undergraduate and postgraduate programmes, as well as, vocational training courses. In this scenario, a project across two different educational levels (vocational training and university degrees) seemed a solution to complete the Primary Education undergraduates' testing skills. The project was conducted by two English teachers and focused on language testing. A group of 24 third-year Primary Education Degree students (major in English teaching) were asked to participate in the assessment of the English subject in a Finance vocational training course (46 students). This project was approached from a peer testing perspective, following the surrogate

teaching method. The Education students designed an A2 English test adapted to the contents studied by the Finance students in their English class.

Apart from providing training in second language testing, this project became an opportunity to increase participants' motivation and achieve these specific objectives, relevant for both educational levels: to enhance students' responsibility when dealing with peers, to enable students' cooperation across different educational levels, to foster the use of computing tools in education, and to improve communication skills in English.

After researching on testing, the Education students opted for the communicative testing approach. Once the test was designed, pretested and checked by the lecturers in charge, it was administered online to the Finance students during class time under the teacher's supervision. The completed tests were e-mailed back to the Education students, who marked them and sent the results, together with feedback, to the testees. These marks accounted for a percentage of the Finance students' English assessment.

Participants' reported opinions reinforced that teaching and learning in real settings were fundamental to find the experience highly rewarding and motivating.

Keywords: Project, higher education, motivation, peer testing.

A TWIST IN THE TRADITIONAL FIRST YEAR CHEMISTRY LECTURE: ADOPTING ACADEMIC SUPPORT PRINCIPLES

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Abstract

This paper focuses on Chemistry students' experiences of the active learning spaces created during first year chemistry lectures at a university in South Africa. Further this paper aims to reveal to what extent we can translate what is known about effective academic support to a large lecture setting. Data was collected over a period of three years and 6 university semesters. Semi-structured student evaluations of the teaching, involving more than 500 student responses, identified the interactive nature of the lectures as the most popular feature of the Chemistry lecture. This was followed by a focus group interview each semester with students who volunteered their time to further clarify their experiences of the first year chemistry course.

Data was analysed using a mixed methodology. Several themes emerged with respect to students' experiences of the chemistry lecture learning spaces. It was established that students valued the discursive learning spaces created through discussion, problem solving and opportunities for reflection as well as meaning making. Students commented that they felt motivated to learn and became aware of what concepts they did not understand.

Keywords: First year chemistry, academic support.

SERVICE LEARNING EXPERIENCE AND THE PROFESSIONAL AND PERSONAL DEVELOPMENT OF SINGAPORE STUDENT TEACHERS

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Abstract

Service-learning (SL) is an innovative pedagogy where students' learning goes beyond the classroom. In the National Institute of Education (NIE), the main teacher training institute in Singapore, the Group Endeavours in Service-Learning (GESL) is an experiential learning opportunity for all NIE student teachers in which they complete small group projects in collaboration with the local community to address local needs. It is hoped that through GESL, participants' communication and collaboration skills, management and leadership skills will be enhanced. It is also hoped that GESL will help to develop their social and emotional competencies. However, there has been few research studies on this. Hence the purpose of this study is to explore how GESL contributes to the personal and professional development of student teachers in NIE.

Ninety-four student teachers from 11 GESL groups were randomly selected to attend a 60 to 90-minute focus group interview. Each interview comprised of 8 to 10 participants. The data interview were subsequently transcribed and a coding manual was created to identify social-emotional competencies and skills learnt or enhanced during their GESL project. The Interpretative Phenomenological Analysis was then used to analyse the data.

Overall, there seemed to be a greater level of self and social awareness. Participants reported getting to know themselves better, in terms of their strengths and weaknesses and how they can contribute to the project. They are also made more aware of communities and organisations that need help in Singapore. There is also enhancement of collaboration, communication and people-management skills. Specifically, many participants reported that GESL had enhanced their ability to work with student teachers from different subject areas and backgrounds. They learnt to manage working relationships with one another by building rapport and through effective communication.

These findings suggest that GESL contributed to student teachers' personal and professional development. This will greatly help in developing teachers with the right values, skills and knowledge to be effective teaching professionals, which will raise the quality of the teaching force in Singapore.

Keywords: Service learning, student teachers, professional and personal development.

INNOVATION THROUGH FLIPPED MODEL OF LEARNING: ENRICHING STUDENTS' AND INSTRUCTORS' EXPERIENCE

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Abstract

The paper provides a brief literature review of the FML, a description of the FML experience within the context of a multi-year project in a major research university - from designing to producing and integrating it into the second-language writing curriculum - and recommendations for scalable implementation. Special attention is given to the benefits of this approach for students as well as to its broader pedagogical advantages.

Keywords: Active learning, digital classroom, second-language writing, scaffolding, flipped model of instruction.

PEER TUTORING: PROMOTING WELLBEING BY ENCOURAGING COOPERATIVE ATTITUDES WITHIN THE SCHOOL COMMUNITY

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Abstract

Youth distress is growing in Italy: statistics for 2014/2015 show an alarming rise of hospitalizations due to depression among young people, as well as a growth of suicides and an increasing percentage of school dropout (15% among natives and 34.4% among students born abroad). Our hyper-technological society seems to provide "easy" practical solutions but, at the same time, generates a dis-integrated social and values framework. This unease expresses itself through rejection of rules, indifference towards culture, revolt, various types of psychological disorder and aggressiveness (bullying). In order to come to terms with this set of problems, a high school in Merano (province of Bolzano, Italy) implemented a peer tutoring program (mediated teaching-learning strategies among equals) in cooperation with a middle school. Preliminary results suggest that students benefited from the program in all inquired dimensions. Students still remain one of the main resource of our schools. They have the ability to build informal networks of mutual support and to create cooperative groups that enhance comprehension, which is significant to all pupils, not only in didactic terms

Keywords: Peer education, life skills, integration, prevention, bullying.

MULTISENSORY CLASS ROOM AS A PEDAGOGIC INNOVATION

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Abstract

The paper presents the concept of Multisensory Classroom (MSC) and it applications at the University of Applied Sciences. The MSC has been in use since 2009 and it was recently updated in January 2018. In short, a MSC is an easily modified space equipped with audio technology and projectors covering three wall spaces. The space includes a storage facility with various objects, such as textiles and light furniture. Teachers and students use the space to create an inspiring learning environment and to demonstrate multisensory experiences. The process of creation of the space is as important as the final outcome. The MSC encourages students to explore various learning content from new sensory perspectives. Furthermore, the space engages students in creating a tangible creation and a multisensory experience.

Originally, the MSC was introduced in association of an introductory course of immigrant students to explore their cultural heritage. To use of the MSC has evolved and today, it is used for variable purposes. The paper outlines applications of the MSC and its future possibilities, as well as identifies need for future study in terms of the physical learning environments.

The MSC relates to the Laure's Learning by developing pedagogy, according to which learning takes place in work-place oriented projects. As a result students gain competence to adjust in rapidly changing working environments. The paper highlights, how a MSC encourages experimental learning and enhances positive learning experience.

The paper draws from a questionnaire conducted among the users of the MSC. It outlines for which purposes the MSC was used, and how the MSC support learning. The proceeds to present suggestion of future applications of a MSC. The MSC including its technological possibilities is an inspiring model to advance the phenome based learning, which as a term is a fundamental component of the recently published new Finnish national basic education curriculum. The paper concludes that a MSC enhances the learning experience and inspires pedagogical innovation.

Keywords: Physical learning environments, pedagogic innovations, technology in teaching, multicultural learning.

ORGANIZATIONAL STRUCTURE FOR 21ST CENTURY HIGHER EDUCATION INSTITUTIONS: MEETING EXPECTATIONS AND CROSSING CHALLENGES

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Abstract

Amidst globalization, marketization, privatization Higher Education Institutions (HEIs) have experienced radical transformations. The basic expectation of organizational structure for 21st century HEIs is to ensure appropriate reporting mechanism, avoiding conflict, facilitate collaboration and enhance productivity. Much depends on the structure of the HEIs in order to meet the needs of stakeholders, align with best practices around the world and to overcome the challenges in complying with the requirements of various regulatory bodies at local, regional and international level. The research aims to examine the roles of organizational structure within higher education context in achieving the requirements of accreditation and professional bodies at national and international level to ensure effective provision of education, quality assurance and enhancement.

Keywords: Quality assurance, hierarchy, institutional imperatives, reporting mechanism, decision making.

INSTITUTIONALIZATION OF ACADEMIC STRATEGIES FOR THE RETENTION OF UNIVERSITY STUDENTS: PERCEPTIONS FROM CHILE

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Abstract

This work presents an exploratory review of the institutionalization processes of academic strategies designed and implemented for the retention of students within universities. In the context of the expansion and massification of higher education; universities have had to define a set of strategies to receive the non-traditional student. The identification of policies and critical actions is fundamental to the achievement of retention, as well as its implementation and monitoring, and finally, the modification of these to ensure that students persist in their educational courses and that there is retention, allowing the achievement of their academic objectives (Moxley et al., 2013).

The institutionalization in organizations is critical to sustaining the actions, strategies, and programs implemented. Since, practices and organizational forms survive and proliferate through a process of institutionalization, through which they become legitimate, when taking for granted regarding cognitive, cultural rationality, the government, in turn, orders them in a regulatory logic and professionals consider them appropriate regarding normative reasoning (Scott, 2001). For this purpose, an exploratory study was carried out in two Chilean universities, 24 interviews were conducted, which were processed and analyzed according to qualitative data analysis, using the Grounded Theory methodology in the NVivo 11 software.

As a conclusion, the institutionalization of the successful academic strategies developed to decrease the dropout and increase the retention of the students, with emphasis on those non-traditional students, is necessary to generate legitimacy and sustainability of their positive results over time.

This institutionalization goes beyond a decree or document because it involves more profound aspects, such as interfering with the structure and functioning of the organization, forming part of organizational learning.

It is evident to the university management teams that it is not possible to sustain all actions over time, due to the cost and the different impact that this implies. That is, not all initiatives are equivalent, and not all of them can be institutionalized. Therefore, a criterion defined by the institutions is to institutionalize those actions that have an essential impact on the retention of students, which are in line with the institutional strategic management system, thus maintaining a balance of cost-benefit.

Keywords: Academic strategies, non-traditional student, mass higher education, institutionalization.

TEACHING AND LEARNING

INVESTIGATING EFL UNIVERSITY STUDENTS' WRITING PERCEPTIONS VIA IMPLEMENTING PROCESS/GENRE APPROACH IN A BLOG-BASED CLASSROOM

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Abstract

This study was to explore EFL students' perceptions toward blog writing and to investigate if there were any relationships in terms of blog writing in a process/genre approach (PGA) writing classroom, which was conducted at a university in central Taiwan. The PGA is relatively new, and related research application has also been scarcely used in comparison to other approaches. Moreover, studies relating to the integration of blog in PGA-based writing classrooms are rarely found. In order to bridge the research gap, a total of eighteen English majors participated in this pioneering mixed-method quasi-experimental study. A questionnaire regarding blog writing, which was cautiously developed and tested by a series of validity and reliability tests, was used to contribute to quantitative data, while semi-structured interviews whose questions were also reviewed by qualitative research methods served qualitative outcomes.

After the data analysis, the quantitative research showed that the students' perception of blog enhanced writing was significantly correlated with blog for socialisation and attitudes toward blog writing after the treatments. The qualitative data demonstrated that there were both advantages and disadvantages when the blog was applied in the EFL writing classroom; however, the features of retrieving more writing samples and online resources, sharing writing samples with others, and receiving and giving feedback to each other have been vastly emphasised by the interview subjects.

It was therefore concluded that the use of blog in the PGA writing classroom improved the EFL students' writing abilities greatly in both direct and indirectly aspects. In terms of the direct dimension, the students were allowed to read others' work, share personal writing samples, retrieve online information, and give comments and feedback and therefore their senses of authorship and readership were possibly developed during the process. Their perception toward writing for socialisation and interaction might be also established simultaneously. As for the indirect perspective, both the students' attitudes and affections could be improved through blogging because they had more interactive and communicative opportunities with others, which helped them learn collaboratively. Consequently, the students would understand that writing could be an interactive process, and it is not merely an individual assignment completion, which was very likely to increase their writing motivations and interests.

Keywords: Students' perceptions, correlations, blog writing, process/genre approach.

VALIDATION OF PRIOR LEARNING IN THE HUNGARIAN HIGHER EDUCATION SYSTEM

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Abstract

The validation of non-formal learning has been in the focus of European discourse in the last decades. As the EU considers validation a policy priority, a Council Recommendation was made in 2012 in order that all Member States develop their national validation system by 2018.

The precondition of validation is that the output requirements of the qualifications should be described in learning outcomes and the qualifications should be classified in the National Qualifications Framework. An important reform was introduced in the Hungarian higher education system in 2015, and at the moment the higher education is the only field where the Hungarian National Qualifications Framework and the improvement of qualifications based on learning outcomes are to be legally applied.

The higher education qualifications were referenced to the Hungarian National Qualifications Framework in the summer of 2015 which classifies the output requirements of the qualifications into 8 levels and 4 categories (Knowledge, Skills, Attitude, Autonomy and responsibility). The two-year higher education vocational qualification equals level 5 in the Hungarian National Qualifications Framework, while level 6 equals to a bachelor's degree, level 7 equals to a master's degree and level 8 corresponds to a doctoral degree. The restructuring of training and output requirements of the higher education qualifications based on learning outcomes began immediately after the classification process. The new system based on learning outcomes applies to the first-year students who are going to start their studies in the term of 2017/2018. This system must be applied as a phase-out system.

The requirements based on learning outcomes can significantly enhance the validation and recognition of competences (e.g. work experience) acquired through non-formal learning because the acquired competences can be compared with the learning outcomes of the qualifications easier.

The subject of our research is the higher education because Act CCIV of 2011 on National Higher Education offers the opportunity of validation of competences acquired through non-formal learning, but full qualification cannot be acquired only through validation.

The results presented are based on a field research. In our research we undertook to present and compare the recognition and practice of validation in the Hungarian higher education system. We examined the present validation practice of all Hungarian higher education institutions (namely 65) and conducted semi-structured interviews.

We compared the documents, decisions, procedures, costs, applied methodology, evaluation methods and information of the validation process of higher education institutions. The analysis revealed the common features of the validation process, such as the process of validation and the preparation of the portfolio.

After studying the current systems, we made a Problem Map so that we could evaluate the obstacles of the validation processes. After identifying the problems, we can outline concrete proposals and recommend tasks.

Our Problem Map also casts light upon the lack of applied methodology, the lack of relationship between the institutions, the lack of funding and demand.

The practical purpose and long-term goal of our research is to give information based on the results of our research and contribute to the development of the national system with our recommendations.

Keywords: Validation, higher education, non-formal learning, work experience, learning outcomes.

QUESTIONS CHILDREN ASK

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Abstract

The purpose of this research project is to investigate the types of questions young children ask and analyzed them using Bloom's Taxonomy. The qualitative method based on collecting data from observation of sixty -three preschool children in the Midwest of the USA for six months and writing down questions that the children asked each other and the teachers. The results demonstrated that children asked teachers practical questions for help, understanding or evaluation. Children ask each other question for analysis, synthesis, and creativity. The observation of children play also revealed that children in play used rather statements and commands than questions.

Keywords: Questions, young children.

SOCIAL STUDIES, COMMON CORE, AND THE THREAT TO CONSTRUCTIVIST EDUCATION

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Abstract

Social studies, an umbrella subject area in K-12 education that includes the study of history, geography, and the social sciences as well as the promotion of active citizenship, is marginalized by Common Core and the accompanying high-stakes standardized testing. At their best, the Common Core Standards draw

the attention of teachers to the need for conscious decision-making, systematic planning, and coordinated instruction as they work to develop student academic skill. However, at its worst, in the Common Core Standards pursuit of de-textualized teaching and learning, it undermines the very essence of social studies education and embrace learning in the absence of understanding. The fundamental problem with Common Core is that it is conceptually backwards (Strauss, 2014). Instead of motivating students to learn by presenting them with challenging questions and interesting content rooted in their interests and experiences, it removes substance from learning, raising a generation of students with limited exposure to not only the historical events of our nation, but also, the key tenets of citizenship. Three cases of outstanding constructivist teaching show policymakers and educators the power and potential of constructivism to empower and engage students as active members of our democracy. Constructivism must challenge Common Core and high-stakes testing; to adapt is to die.

Keywords: Social studies, constructivism, common core.

A STUDY ON COOPERATIVE LEARNING OF STUDENTS PARTICIPATING IN LIBERAL ARTS CLASS OF MULTICULTURAL EDUCATION

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Abstract

Cooperative learning is considered as one of effective approaches with validity and generality in education to enhance all students' achievement. However, its value and application have been still ignored in higher education. The purpose of this study is to investigate the meaning of cooperative learning experience through the role play among undergraduate students who took a liberal arts course related to multicultural education of 'I' university in Korea. In this study, we adapted qualitative research method, including participant observation and focus group interview. We collected reports, questionnaires, journals, and role-play scripts. Finally, we analyzed the implications of experiences of students in terms of interdependence and individual responsibility as core elements of cooperative learning. Results are as follows: First, interdependence was experienced by students in dealing with conflicts in the cooperative learning process. It reflected their own will to pursue and practice a strategy for harmony and coexistence among members. Second, recognizing that one's role in a team influences on other members and team achievement, students seriously took individual responsibility. Individual accountability is rooted on and realized by interdependence. Such outcomes may not be pursued or gained without intentional means of cooperative learning. Thus, cooperative learning is a place of practice for harmony and coexistence. Interdependence and individual responsibility are cornerstone for coexistence.

Keywords: Role play, cooperative learning, coexistence, learning experience.

THE CRITICAL REFLEXIVITY OF FIELD SOCIAL WORKERS WHO ARE WORKING WITH FAMILIES: RECOMMENDATIONS FOR THE EDUCATIONAL PROCESS

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Abstract

In a postmodern society, where key institutions such as the family are failing, assistance in the form of social work is particularly important, especially for excluded families with children. The heterogeneity of families and society as a whole is increasing and that reality accompanies the problems and issues that social workers encounter. The rising complexity of problematic situations requires new knowledge and competency on the part of professionals. With the emphasis of the above, we carried out research on the critical reflexivity of field social workers who are working with families. The research aimed to map and analyze the critical reflexivity and its areas in field social workers. In the research, we viewed knowledge

in social work as the interconnection of the theoretical ("know what") and practical level ("know how"). The research was based on a qualitative research strategy; this took the form of Critical Action Learning, and was built on a relationship-based model. The research methods included a combination of in-depth interviews, "photo voice" and focus groups. Social workers from three different organisations participated in the research. The research findings have shown that the critical reflexivity of social workers is associated with several areas, in particular with professionalism, an empowering approach to clients, and self-assurance in the social worker's role. Based on research, recommendations are given to facilitate the educational process of social workers.

Keywords: Critical reflexivity, social work, families, critical action learning, educational process.

LECTURES, ATTENDANCE AND ENGAGEMENT: CAN WE REVERSE THE DECLINE?

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Abstract

Action research methodologies can be helpful to instigate and research the impact of multiple or iterative changes to practice. The teaching of mathematics to non-mathematicians is a long standing and multifaceted challenge. One of the more recent complexities is linked to student engagement with lecture environments. This paper provides readers with personal insights to the preliminary stages of an action research project where a flipped classroom model has been applied to a business mathematics curriculum where lectures are delivered to 300+ students. The flipped classroom was chosen due to the wealth of literature linking the paradigm to student satisfaction and engagement. The first cycle revealed unanticipated yet key findings which highlights both levels of satisfaction and the potential learning gains are significantly linked to students' commitment to the process.

Keywords: Lectures, student engagement, flipped classroom.

L2-PROFICIENCY AND MATHEMATIC COMPETENCES OF 10-12 YEAR-OLD CHILDREN IN SWISS TWO-WAY IMMERSION ELEMENTARY SCHOOL PROJECT *FIBI*

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Abstract

This article presents a study that was conducted in the (Swiss-) German and French bilingual city Biel/Bienne in Switzerland during 2016-2017. The paper investigates the effect of a two-way immersion school project (FiBi) on the L2-Proficiency of children 10-12 years old. Using mathematic tests, the study examines whether learning in another language affects school competences. Comparing FiBi students (n=41) and a control group (n=24), the analysis reveals a significant higher L2 proficiency in four tested competences and no significant difference in mathematics results. Some recommendations for the improvement of the two-way immersion project and for further research are presented in the final part of the paper.

Keywords: Bilingualism, two-way immersion, French, German, L2-Proficiency, primary school.

SUPPORTING LEARNER AUTONOMY IN HIGHER EDUCATION

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Abstract

This paper presents examples of some innovative approaches to language learning in higher education. It explains how some of the elements that are typical for language coaching can be used in the specific teaching context of a post-graduate course in English for Specific Purposes to enhance language learner autonomy, providing empirical evidence from a pilot study. The core of the qualitative study lies in the analysis of interviews with learners who have completed the course. The new approaches are motivated by those of the author's beliefs that are related to the so-called post-method concept in language teaching methodology and also connected with the conviction that autonomous students find it easier to learn the top soft skills that will be required from professionals in the 21st century, including critical thinking, creativity and emotional intelligence. The paper also outlines the design of the future action research that will draw on the collected empirical evidence and will include the analysis of observation and self-observation reports and learners' goals, aiming at redesigning the course syllabus.

Keywords: Autonomy, higher education, language coaching, English for Specific Purposes, pilot study.

"I'M NOT CUT OUT TO BE A TEACHER": REFLECTIONS ON AN ENGLISH TEACHER TRAINING PROGRAM

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Abstract

This study investigates the reasons why many students in an English teacher training program in a Japanese university fail to complete it. It is usual for around one hundred students to enroll in the university's program in the first year. At the start of the second year, there are around sixty students. Forty remain in the program in the third year. At the end of the fourth year, only thirty students receive their license to teach English at the secondary school level. Of those thirty, only ten or even less than ten take up teaching posts in schools. For at least the last five years of the program, this has been the pattern. Although other universities with comparable programs report similar numbers abandoning courses of study, this seventy per cent rate of incompletion warrants investigation. At the outset, the students seem well motivated and eager for an English teaching career. What, then, accounts for so many not staying on the course until completion? To provide answers, I have conducted interviews and research over five academic years with first, second and third year students who have left the program. My paper analyzes and reports on the reasons these students give for leaving. I also give some recommendations on ways educators might enlighten student teachers on what to expect from teaching.

Keywords: Teacher training, teacher trainee, motivation.

HOW TO BUILD A RESEARCH CULTURE AND ETHOS: FROM STUDENTS TO NOVICE RESEARCHERS

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Abstract

In this paper, we present the processes we follow in order to enhance and refine the links between Research and Teaching in Higher Education. The stepping-stones towards the creation of a more engaging research-led learning environment are showcased along with good practices for orienting students towards research. Fostering student-led research communities is a great challenge and requires innovative approaches. Here, we illustrate how the model we have established enhances students' autonomy, engages them in constructive research, and provides them with numerous transferable skills. Combining a novel perspective of curriculum design with the ongoing management of educational research, we explain how concrete and clearly identified steps (e.g. research ethics activities, student-driven coursework, dissertation projects, and targeted research seminars) can help students develop into early-stage researchers. We also introduce specific examples of how Project-based Learning (PBL) gradually prepares students to explore authentic research questions, deal with ethical issues, submit and present their work at International Conferences and publish their research findings. More significantly, we explore students' own perspectives towards this research culture, as those emerged in videos of students evaluating the above activities and their overall experience of the suggested practices and methods.

Keywords: Research, best-practices in higher education, skills and ethics, student engagement, PBL.

SOCIAL NETWORKS AS NEW PLACES FOR INFORMAL LEARNING: A GROUNDED THEORY ANALYSIS IN HIGHER EDUCATION STUDENTS COMMUNITIES

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Abstract

Facebook has been recognized as one of the most used tools in supporting undergraduates' informal learning (Akcaoglu & Bowman, 2016). Furthermore, students seem to prefer Facebook rather than the E-Learning tool provided by their University to achieve their learning goals (Eger, 2015). Although Social Networks (SN) have been recognised as fertile environments for informal learning (Mao, 2014), especially in encouraging knowledge exchange (Forkosh-Baruch & Hershkovitz, 2012), the empirical research activity about this topic is still lacking (Sackey, Nguyen, & Grabill, 2015). This study aims to explore the undergraduates' point of view on the informal learning processes, which take place on SN. The main research questions are as follows: 1) how do undergraduates use SN for supporting learning activities? 2) How do students leverage these resources? 3) Which are the social dynamics and roles involved in these informal learning communities? 34 members of 13 Facebook groups (FBG) have been involved. The participants were recruited posting an informal invitation on several Italian undergraduates FG. The students were interviewed with a semi-structured questionnaire that was developed according to the indications of Patton (2002). The data analysis followed a grounded theory approach (Charmaz, 2014) in order to maintain a strict adherence between students' voices and results. The analysis also included the use of Nvivo 11 (qualitative data analysis software). Results suggest that undergraduates create communities for "help matters"; the aid can be addressed to themselves or other people. In both cases, the FG creation could represent the best compromise to face a new university path. Students mainly use online communities to know each other, exchange textbooks, make decisions together or share learning materials. Online activities are often regulated by norms, which may be explicit or implicit. The crucial role of these informal learning environments is covered by the admin, who create, manage, and support the communities of students. Furthermore, several roles seem to emerge, like the co-workers, the lurkers and the information' guarantors, and the providers. The majority of participants recognises the key role of these informal groups for their own university path, especially for creating networks and gathering information (or learning materials); all of these information are mediated by the user-friendliness of the tool. These results might suggest new ways to improve students' learning; official communications between university and students could be easier on SN.

Keywords: Educational technologies, social network, higher education, grounded theory, informal learning.

COGNITIVE DEVELOPMENT OF STUDENT-SPORTSMAN – WAY FOR CHAMPIONS

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Abstract

In the present work, the question is raised relative to the contribution of educational institutions to harmonious development of the student-sportsman personality. The problem of socially active education of a student is discussed, as well as the contribution of educational institutions to the cognitive development and the formation of the sportsman personality. With the help of a theoretical-historical analysis and biographical method, an analysis of the life path of initiators and companions (associates) of the development of sports movement in Russia, as well as the life histories of outstanding sportsmen (athletes) - champions of the Olympic Games and Chess Olympiads, graduated from the St. Petersburg State University was made. Subject areas, which were mastered by the heroes in the years of their study at the university and determined their cultural and ideological appearance in the subsequent years of life are marked. A study of the collective image of a modern sportsman (athlete)-universant (a University graduate) was performed, in which graduates and teachers, who represented the University, city, country at international and Russian competitions (including participants and prize-winners of the Olympic Games) took part. Respondents noted the most striking episodes of their sports life during their studies at the University, the sports award that is the most precious for them, they drew a generalized image of a university sportsman, named their life slogan (motto), shared what the University is for them. The received results testify about the really significant contribution of educational institutions in forming the personality of future champions, as well as of ideologists and practitioners of realizing (implementing) sports initiatives.

Keywords: Sport, student-sportsman, health, cognitive development, higher education.

THE CHALLENGE OF FOSTERING EQUITY IN A TESOL GRADUATE COURSE: A PARTICIPATORY ACTION RESEARCH PROJECT

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Abstract

Equity is not simply the act of treating everybody as equal, but to make the unprivileged ones have the same opportunities of growth as the rest of the society in which they live. This presentation discusses the importance of applying participatory action research to educational contexts and exemplifies with a project which attempts to help learners that have a lower level of English than their classmates succeed in their ELT graduate course.

Participatory research (including action research) is always interdisciplinary, linking education, communication and the area in which the study. It based on socio-interactionism, it takes place in a socio-cultural context and counts on the participation of many different agents. As Paulo Freire (1998) used to say, the one who teaches learns at the same time and the one who learns teaches too. Participatory research is social research but at the same time they are educational action. It means to understand the reality in order to be able to transform (change) this reality. In the beginning, the project was almost a one-teacher's idea, but learners were invited to take an active role and now many learners (future teachers) are also involved in the research.

The theoretical background of the study includes concepts such as: participatory action research; autonomous learning; learning strategies; collaborative learning; and ICTs in education. The idea is not only to focus on the development of the learners' linguistic competence, but their learning strategies awareness as well. The study is also an attempt to develop methodology awareness and to discuss effective ways of using digital technology for learning and teaching of English. All the participants of the research are future teachers, so we expect that the participation in the project will contribute for the development of more collaborative, critical and creative language teachers.

The project started three years ago, and its results have been very positive, with less dropouts and better grades. Courses were organized, virtual communities were launched, scholarships were negotiated; and a VLLE (virtual language learning environment) was developed. However, we faced some problems during the project implementation as well. Two of them were learners' lack of time and the lack of funding to buy materials for them. The last part of the presentation consists of the analysis of these results, by using learners' feedback as the main source of information.

Keywords: Teacher education, methodology awareness, participatory action research, technology, learning strategies.

THE EFFECTIVENESS OF DEMONSTRATIONAL METHOD IN PROMOTING STUDENT CENTRED METHOD: A CASE STUDY

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Abstract

Civil Technology is the subject that emphasises theory and rigorous practical work for it to be regarded as one of the sought-after subjects. The problem is many teachers prefer a theoretical approach to teaching it at the expense of practical which then promotes teacher-centred method. The aim of this case study was to observe the effectiveness of the demonstrational method in promoting student-centred strategy or method of teaching and learning. The main objectives of the study were to determine the level at which demonstration method could promote student-centred method. Researcher used mixed-method (qualitative and quantitative) to collect data. A structured interview (verbal test) and practical performance test (quantitative) developed by the researchers and pre-tested for reliability and validity for clarity and relevancy, were used as data collection instruments. Purposive sampling was used to select participants, 28 participants were characterised by males and females of the same age group of between 19 to 25 years who came from the diverse cultural background, doing Baccalaureus Education Senior Phase and Further Education and Training: Technology register for Civil Technology III at Central University of Technology, Free State South Africa. Measures which were used in the research such as teacher knowledge demonstration, teacher practical work demonstration, Video of subject content lesson presentation (dumpy level) observation by the lecturer and students, students verbal test and students practical performance test were used for the first stage and last stages of the research. An interpretive approach was used in the research in order to facilitate interact with the participants with the view of understanding making meaning to their context. Data collected were analysed, coded, categorised into themes and comparative analysis done leading to the interpretation of the results by the researcher. The study revealed that majority of the students understands the theoretical content faster when the lecturer presents the theory through the demonstration method. The results also indicated that students get motivated and enthusiastic when they are actively involved in the technology lesson presentation by being hands-on, reflecting the need for the student-centred method which enhances scholarship of teaching and learning.

Keywords: Demonstration method, student centred method, theoretical content, practical skills.

CURRENT SITUATION IN THE RESEARCH OF TEACHING ENGLISH GRAMMAR IN SLOVAKIA

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Abstract

The presentation provides a coherent survey of current developments in the field of teaching English grammar, based on the presentation and analysis of research findings in the Slovak educational context. Referring to Keith Johnson's model of language learning as skill development, the author highlights some crucial problems associated with the development of declarative and procedural grammar knowledge. A

theoretical analysis focusses on their possible causes from linguistic, psychological, and educational perspectives. The need for further research is emphasized by presenting numerous questions and stimuli for theoretical analyses and empirical research. The subsequent findings should underpin linguodidactic recommendations.

Keywords: Teaching English grammar, declarative knowledge, procedural knowledge, causes of crucial problems.

THE INFLUENCE OF GPA ON ACHIEVEMENT EMOTIONS

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Abstract

Emotions that are directly related to student's learning, classroom instruction, and achievement are termed as academic emotions (Pekrun et al., 2002). Students experience a variety of emotions in academic settings that influence their cognition and behavior and therefore their learning process. While it is clear that students frequently experience negative emotions, less is done to find out what trigger achievement emotions. The current study aimed to identify the relations between GPA and achievement emotions. Participants in this study were 800 high school students who were recruited randomly in 23 high schools in Kosovo. Achievement Emotions Questionnaire – Mathematics (AEQ-M; Pekrun, Goetz & Frenzel, 2005) was used to collect the data regarding the achievement emotions. On the other hand, GPA was calculated by summing all grades earned and dividing by number of courses completed. Similar to previous studies it was showed that GPA is an important factor for the model and therefore it is an important variable on predicting and explaining the achievement emotions. In this study, GPA showed to be positively related with enjoyment and pride, while was negatively related with anxiety, anger and shame. By identifying the contribution of GPA on achievement emotions, a good basis to develop a support strategy for students with negative achievement emotions is provided.

Keywords: Achievement emotions, GPA, high-school students.

A STATISTICAL ANALYSIS ON THE FACTORS INFLUENCING MATHEMATICS ANXIETY IN UNDERGRADUATE STUDENTS OF MATHEMATICS AND ENGINEERING

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Abstract

Mathematics Anxiety (MA), the 'phobia of numbers', is related to poor performance in Mathematics. There are numerous studies that discuss a wide range of factors affecting Mathematics Anxiety in students at primary and secondary schools. Furthermore, there are some studies looking into MA in students of Psychology, Engineering and Nursing at a Higher Education level, see, for example (Alves et al. 2016; McMullan et al. 2012) and more references therein. However, we believe that this is the first work on MA in undergraduate students of Mathematics. Consequently, our purpose is to determine whether factors such as gender or ethnicity affect MA. Our main results are that there are significant differences between male and female students; there is a significant difference among students with three siblings or more, compared to students who have two siblings or less. Finally, we discuss the significant difference between the gender of the main family figure providing Mathematics support amongst students with a British and Non-British background.

Keywords: Mathematics anxiety, ethnicity, gender, mathematics, higher education.

A MULTI-ELEMENT APPROACH TO IMPROVING ACADEMIC ENGLISH WRITING INSTRUCTION IN JAPAN

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Abstract

Japanese university students typically find academic writing extremely difficult (e.g., Davies, 2000). This no doubt has much to do with their high school education, which traditionally has focused on grammar within a reading and English–Japanese translation framework, and recently has begun focussing more on conversational interaction. In neither case do students typically write more than two or three sentences for a single "composition". Thus, university writing instruction needs to tackle nearly all aspects of writing from a near-beginner level.

Experience and previous research show that aiming for a minimal level of fluency is necessary as a first step. For reasonably proficient English majors, experience likewise suggests that instruction focused on the structure of paragraphs and on simple essay structures beyond a single paragraph (such as five-paragraph essays) can be effective in a relatively short period of time.

However, analysis of essays submitted in Research Writing classes, as well as graduation dissertation drafts and final versions, suggests that the persistence of basic grammatical errors and other surface errors such as spelling mistakes is a more intractable issue, which so far has proven rather impervious to instruction.

This presentation describes a multi-threaded approach aimed at tackling this issue, in order to reduce the number of errors in drafts to a more manageable number.

The approach is characterized by: an initial focus on fluency and quantity, to foster basic proficiency and confidence; sustained corrective feedback; an input-output cycle; and an imaginative mix of technologies to allow a kind of coded, targeted corrective feedback to be delivered in an economical and therefore sustainable fashion.

Keywords: Japan, language education, writing instruction, errors, sociocultural theory.

MATHS PROBLEMS IN PSEUDO-CODES COMPARED TO COMPUTER USAGE

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Abstract

Three groups of BSc students of Informatics were tested on the first week of their studies at the University of Debrecen, Hungary. In the test, we presented four elementary maths problems in pseudo-codes, and students were asked to answer the question "What does the following program do?" Beyond measuring the students' results in the test, our question was how the time students spend on computers and mobile devices functioning as computers affects their results in solving these problems. Differences were revealed between the three groups of students considering their scores in the test. It was

Differences were revealed between the three groups of students considering their scores in the test. It was further found that the more time they use computers their results the better, while, on the contrary, the more time they spend on their mobile devices the results are the lower. Those students' results were the lowest who were heavy mobile users and no significant differences were found between the average and the occasional users. We can conclude that computational thinking and algorithmic skills are not predefined by birth, not the privilege of born in the digital era, of being hooked to mobile devices. These skills can be gained by learning, practicing, coaching, in general, with the help of teachers armed with all the components of TPCK (Technological Pedagogical Content Knowledge) and with the belief in the incremental nature of sciences.

Keywords: Algorithmic skills, maths problems, pseudo-codes, computers, mobile device.

FLIPPED CLASSROOM, C.L.I.L. AND CLASSROOM SETTING: INNOVATIVE LEARNING EXPERIENCES IN AN ITALIAN PRIMARY SCHOOL CLASS

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Abstract

The present paper briefly illustrates an action research carried out in the school years 2015-16/2016-17 in a full-time primary school, located in Fiumicello, a small town in the North East of Italy. The pedagogical practices adopted have involved a 4th and then a 5th grade class.

The elements of innovation have concerned both the introduction of some C.L.I.L. (Content and Language Integrated Learning) and flipped classroom modules and the organization of the classroom setting with the desks shaped as square islands. The choice of both these methodological frameworks has consequently led to a constant use of the cooperative learning and of a teaching approach based on learning by doing, the implementation of tasks in groups and in peer-to-peer mode, in a context of an assisted laboratory, greater use of ICT, a substantial change in assessment practices.

The learning design and the learning experiences have been evaluated through the employment of two tools: rubrics for assessment and continuous observations recorded on a logbook.

For both the learning frameworks the experience has highlighted pros and cons results, with a large majority of the former, which we can summarise as follows. Firstly, longer periods are needed to run the same amount of content of a "traditional" class, even if pupils develop more skills and competencies, necessary for a lifelong learning. Despite the fact that there are more chaos and noise in the classroom, the sedentary lifestyle at school is reduced and pupils have a more rapid perception of the passing of time. Thus, children are more motivated and involved. Although teachers need longer time to plan the activities, the learning pathways are more individualized. Finally, an improvement of the skills in the foreign language, due to the C.L.I.L. approach only, has been recorded among the majority of the students.

Keywords: C.L.I.L., flipped classroom, classroom setting, primary school, action research.

ORGANIZATIONAL ISSUES

THE IMPLICATIONS OF ARTS EDUCATION ACTS FOR PROFESSIONAL MUSIC TRAINING PROGRAMS: THE TUT EXPERIENCE

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Abstract

The Arts Education Act (AEA) of 2015 is a sequel to the Special Education Act of 1984 that was designed to apply relevant theories to curriculum standards for education reform in Taiwan. The Acts are founded on the belief that high expectations and setting goals will result in success for gifted and talented students. In 2000, the Ministry of Culture, Taiwan, reauthorized the Law of Arts Education of 1997 as the AEA of 2000. The latter Act directed the Ministry of Education at the level of central government. municipal government at the level of special municipalities, and county (city) government at the level of counties (or county-level cities) to implement the teaching of art theory and techniques at schools, carry out artistic research and creation, and cultivate a diverse group of arts professionals. The reauthorization mandates that funds, knowledge of art, and art-related courses be incorporated following the model of artists-in-residence projects. Researchers in the field of music education policy argue that the focus of music education policy must be on the people dealing with music and their varied musical practices rather than only musical works and their dissemination. The purpose of this case study is to revisit and examine policymaking within the context of professional music training programs by describing and analyzing the history of arts education in Taiwan and the current policymaking framework implemented at the Tainan University of Technology (TUT), Taiwan. The conclusion drawn is that effective policymaking involves democratizing access to works of fine art and strengthening the role of music in society. Education institutions can provide a conceptual framework for understanding the implications of the AEA of 2015 for professional arts education in both the legal macro- and microenvironments.

Keywords: Education policy, arts education act.

EDUCATION REFORM IN TRINIDAD AND TOBAGO THROUGH THE LENS OF COMPLEXITY THEORY

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Abstract

The education system in Trinidad & Tobago, since independence from Britain in 1962, has been subject to on-going reforms, and while there has been some improvement, in the secondary sector thousands leave school every year with minimal or no qualifications. Threats to equity and social justice continue because, the failures occur primarily in the state-led sector, which houses the majority of students, many of whom are of African or Indian ethnicity and of lower socio-economic status. The 'prestige' sector is much smaller, high-achieving, and mostly traditional denominational, grammar schools which houses, in addition to high-achieving African and Indian students, those of the wealthy White, Syrian-Lebanese and Chinese minority communities.

Historically, there has been a concerted effort to maintain this dual system in secondary education. While that continues to be contentious, reforms directed mainly at the state-run sector, have not resulted in any palpable improvement. Teachers and other educators repeatedly question the central role played by politicians in the "roll out" of any reform. This paper is based on data collected from 13 teacher educators who assist teachers on a daily basis in improving their teaching and implementing reforms. They were specifically asked about their experiences and perceptions about education reforms as enacted and their reflections on the possible reasons for the continued massive failure in the secondary system. These responses were subject to qualitative data analysis.

The paper attempts to show that a paradigm shift is long overdue; one that takes on board the experiences of all stakeholders in a meaningful manner; and, one which sees education as 'a sprawling ecosystem' rather than a tight unit amenable to top-down or bottom-up approaches. The idea of a complex system with positive and negative feedback loops, emergence, a turbulent and changing external environment, as

well as, the salience of micro-level knowledge, speaks to how the system is really constituted. Such realities have been ignored in attempts at reform, and perhaps may not be able to be sustained because crucial elements: constant dialogue across different stakeholder groups, paying close attention to the experiences of various groups, collaborative relations, regarding teachers as the true gatekeepers of the reform – seem to be inimical to the goals and purposes of those in control. The paper ends with some ideas on how a traditionally oriented, politically-driven education system could learn from reform approaches based on complexity theory.

Keywords: Trinidad & Tobago, educational reform, complexity theory, equity, secondary education.

INSTRUCTIONAL MANAGEMENT IN TEACHER TRAINING INSTITUTIONS, LAO PDR

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Abstract

This study aims to investigate the instructional management problem, problem comparison, and gathering of opinions of teaching staff toward the problem-solving of instructional management within three Faculties of educations. There were 196 teaching staff as the sampled from three Faculties of Education within three Public Universities in Laos that used purposive sampling Gar & Airasian, (2005) for Target Universities and Faculty of Education and used the tabulation technique for sample size Krejcie & Morgan (1970). The self-constructed questionnaire was 38 items in total under the four subscales (five-point Likert scales) with a drastic vetting twice of its validity and reliability by the ad-hoc therapist. The data collection took place between June-July, 2016 in Laos by paper-pencil as well as data analyzed through SPSS program to see the frequency, percentage, arithmetic means, standard deviation, t-test; f-test, and Scheffe technique. The study showed that instructional management problem under the four subscales was found at the moderate level both overall mean score and subscale individually. Pertaining to the problem comparison of instructional management by gender and teaching experiences found both were not statistically significant differentiation opinions among teaching staff at .05 and teaching staff's opinions toward problem of instructional management, the majority of the respondents suggested that educational leaders within three faculties should be provided an equity and equality of learning the opportunity to teaching staff in attending the specific training purposes and skill needs urgently that concerned to the four sub-scales studied mainly. Besides, teaching staff themselves should be minimized negative behaviors, reduces a single theory tracking form and in turn, they should increase and promoting of peer-review, learners-centered, role-play, field trip, activity, and examples related, group focused, learning tasks, and self-producing the instructional tools.

Keywords: Instructional management, creating a lesson plan, media applications, assessment.

IMPROVING ARTICULATION BETWEEN TVET COLLEGES AND UNIVERSITY ENGINEERING PROGRAMMES IN SOUTH AFRICA

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Abstract

One of the main goals of South Africa's National Qualifications Framework (NQF) is to facilitate access to education, as well as articulation, mobility and progression between qualifications in order to redress past social injustices. This paper will very briefly introduce the articulation imperatives of the NQF in relation to articulation possibilities for students from Technical and Vocational Education and Training (TVET) Colleges to Higher Education Institutions (HEIs). It was envisaged that this type of articulation would be both uncomplicated and frequent, but this has not been the case. This paper will primarily describe the preliminary finding of a case study seeking to develop an understanding of the enablers of student transitioning between TVET Colleges and HEIs in the engineering sector. These processes are

being explored to identify the good practices where they occur and, to propose and develop solutions where processes retard the articulation imperative.

The preliminary results of this case study show both positive and negative aspects of articulation. Epistemic injustice in found in the relationships between TVETs and HEIs, and a limited understanding of articulation and access issues by both TVET and HEI staff is also noted. Inclusion of TVET personnel in the development of new curricula at the universities, or even in the dissemination of information in regard these changes appears to be absent. HEI staff also lack of familiarity with the new TVET curricula, and TVET staff are unfamiliar with the HEIs entrance requirements which may be giving students false expectation regarding the pursuit of further studies. On the positive side, established pathways that often include credit transfer, exist for students from the older 'N course' qualifications articulating into University of Technology (UoT) engineering programmes.

The preliminary findings also confirm the position that the development of epistemically just, collaborative relationships between TVET Colleges and HEIs offering Engineering programmes, may be useful in any effort to improve articulation between these institutions.

Keywords: Articulation, epistemic injustice, TVET, vocational training, engineering education.

A META-ANALYSIS ON THE RELATIONSHIP BETWEEN CHARACTER EDUCATION AND STUDENT ACHIEVEMENT AND BEHAVIORAL OUTCOMES

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Abstract

An extensive meta-analysis, including 52 studies, was undertaken on the relationship between character education and student achievement- and behavioral- outcomes. Additional analyses were done to determine whether the effects of character education differed by student grade level, locale, and race, etc. The results indicated that character education is associated with higher levels of educational outcomes, no matter what type of standardized or non-standardized measure was employed. Character education was also related to higher levels of expressions of love, integrity, compassion, and self-discipline. Overall, character education had somewhat greater effects for children in high school rather than those who were in elementary school. The effects of character education did not differ by the race of the children. The significance of these results is discussed.

Keywords: Character education, moral education, meta-analysis, academic achievement, student behavior.

CHARACTERIZATION OF THE "EDUCATION & EDUCATION RESEARCH" JOURNALS INCLUDED IN THE JCR

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Abstract

The evaluation of the quality of scientific journals is a topical issue. The implementation of an evaluation policy based on international indicators has contributed to improving the quality and visibility of journals from different countries, measured through their indexing in the Journal Citation Reports (JCR) databases. Currently, in some countries, such as Spain, the main criterion used to evaluate the performance of individuals, institutions or research groups is the number of publications made, especially in high impact journals in the JCR. However, the adoption of international evaluation criteria based on the JCR has been the subject of numerous criticisms by researchers, who are forced to send their research papers to foreign journals to the detriment of the journals of their own country, since in order to obtain a positive evaluation it is fundamental to publish in high demand journals, mainly published in English.

In this competitive environment, where the pressure to publish in quality journals is a reality, it is useful to know the profile of the journals of your specialty in order to be able to select the one that is most appropriate for the dissemination of your own work.

Keywords: Education journals, scientific journals, impact factor, JCR, bibliometrics.

CREATIVITY AT SCHOOL? - PERFORMANCE DIMENSIONS IN THE CASE OF POLYTECHNIC HIGHER EDUCATION

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Abstract

This paper reports on the preliminary results of a project that aims to assess the state of the art of creativity in Portuguese polytechnic higher education institutions. The framework was based on the dimensions of creative potential and performance (e.g. Runco, 2007a and b) and on previously developed studies (Piteira, 2016). The research question that drove this work was: What is the state of creativity in the different schools that comprise the Lisbon Polytechnic Institute according to their creative potential and performance and with a view to developing future efficient innovation strategies? This was followed by a qualitative case study approach, which would later enable a cross-case comparison between the schools considered to be the most creative. The eight schools of the Lisbon Polytechnic Institute were included in this exploratory analysis; the dimensions and related outputs of creative potential and performance were identified through the analysis of newspapers, websites, and newsletters. Following this research design, exploratory interviews with actors with responsibility over innovation and entrepreneurship policies and strategies in the LPI were conducted so as to validate the content analysis derived from the newspapers, websites, and newsletters. The results show how these schools compare to one another in such creative potential and performance dimensions in terms of creative products and services outsourced to the community; projects with business potential that have entered in the entrepreneurship competitions; and awards and honourable mentions in (inter)national competitions. The salient finding is that efforts to implement strategies to trigger creativity in these schools are underway. Suggestions are provided for future research and effective strategies in the field of innovation through creativity in the polytechnic higher education system are discussed.

Keywords: Creative potential and performance, case studies, polytechnic higher education.

THE DIFFERENT EFFECTS OF VOLUNTARY AND INVOLUNTARY ACTIVITIES ON POSITIVE AFFECT: FLOW AS A MODERATOR

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Abstract

Previous studies have shown that voluntary activity was related to positive affect. Voluntary activities make people feel more positive compared to the involuntary activities. Flow is the optimal subjective experience people feel when they are engaged in balanced activity between skill and challenge. The more people experience flow, the more likely people become spontaneous and feel positive. The study was aimed to examine the different effects of voluntary and involuntary activities on their positive affect and also to explore the moderating effect of flow. Eleven graduate students participated in the systematic phenomenological method: the Experience Sampling Method (ESM). The application PACO (Personal Analytics Companion), named and developed by Google in 2010, was used to collect ESM data. 538 response-level data were collected and standardized (Z-scored). 196 of 538 response-level data, in response to a question asking for the spontaneity of their activities, were analyzed. The PROCESS macro was used for the analysis of the moderation effect of flow. The results of the study showed that voluntary activities make graduate students feel more positive than involuntary. The moderating effect of flow between voluntariness of activity and positive affect was significant. At low flow level, people felt

negative in both voluntary and involuntary activities. At the middle flow level, people felt negative in involuntary activities, while they felt positive in voluntary activities. At the higher flow level, people felt positive in both voluntary and involuntary activities. These results suggest that flow interacts with the voluntariness of activity in deciding whether people feel positive. The implication of the results in education will be discussed.

Keywords: Experience sampling method (ESM), voluntariness, positive affect, flow, PACO.

SOCIO-CULTURAL EXPERIENCES OF INTERNATIONAL STUDENTS IN IRELAND AND THE IMPACT THESE EXPERIENCES HAVE ON THEIR SELF IDENTITY

Sharon Harris-Byrne

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Abstract

This paper was designed and carried out in order to examine the socio cultural experiences of international students in higher education in Ireland. The investigation examined the impact of these experiences on a set of key relationships connected with these students' concepts of self-identity and sense of self (Giddens, 1991). Giddens (1991) theory on reflective self-identity underpinned the theoretical approach to this research. This study was qualitative in nature and a multi site case (Merriam, 1998) was the approach that was taken to best answer the research questions. At the time of publication, it was the only study in Ireland to consider international students in numerous campuses. Focus groups and semi structured interviews were used. The sample of forty seven international students representing twenty six different nationalities who took part in this study were registered in a range of disciplines at both undergraduate and postgraduate level. The attention of this paper is the self identity of the students. This research found that the experiences in Ireland were an integral part in the lives of these students which resulted in an exposure to new opinions, ideas and experiences feeding into the reflexive project of the self.

Keywords: Socio-cultural, experiences, international, students, self-identity.

COMPARISON OF SINGAPORE, JAPAN, ESTONIA AND TURKEY BASED ON EDUCATIONAL LEADERSHIP AND SCHOOL GOVERNANCE ACCORDING TO PISA 2015

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Abstract

Evaluating the success of the school systems every three years, PISA is a wide-ranged research program. In addition, one of the subjects PISA focuses on is why some countries have a high success rate while some aren't successful enough. In this context, this study aims to compare Turkey's educational leadership and school governance with the countries whose science scores are the highest. The countries with the highest science success rate, compared to Turkey, are Singapore, Japan and Estonia. Correlational research has been used, and the surveys given to the school principals by PISA have been taken into consideration. Four indicators have been applied to educational leadership level. In the educational leadership context, principals' curriculum leadership, instructional leadership, professional leadership and the teachers' participation in school development have been compared in these four countries. On the school governance level, principals' views on principals, teachers, school governing board, local or regional education authority and national education authority have been taken into account. These subjects compare the responsibilities of the countries in the context of school governance according to resources, curriculum, establishment of student disciplinary policies, establishment of student assessment policies, and approval of students for admission to school. The comparison has been

made on the ratio of principals who claim on the educational leadership surveys, to have been a leader at least once a month. According to this, excluding Japan, the items in which principals in Turkey show leadership less than those in Estonia and Singapore are "ensuring that the occupational development of teachers complies with the school's objectives", and "discussing school's academic goals with teachers during teachers' board meetings". The results based on the principals' views on school governance are as follows: Turkey has the lowest rate in use of resources, curriculum, establishing student disciplinary policies, establishing student assessment policies, approving students for admission to the school, as the main responsibilities of principals. Turkey has lower school governance compared to the three most successful countries. The presented PISA data have been compared with the findings in the literature. The results found in the study are expected to improve the school administration, to contribute to the preparation and occupational development of school leaders, and to establish a basis for the educational policies in Turkey.

Keywords: Educational leadership, school governance, PISA, Turkey, school management.

PROMOTION OF ENTREPRENEURSHIP EDUCATION IN SOUTHEAST ASIA

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Abstract

The onset of globalization and increased regional economic integration has presented new challenges as well as opportunities for SMEs in Southeast Asia. Entrepreneurship and entrepreneurship education are two discussed topics in the past few years promoted in all the national and Southeast Asian educational and political reform strategies. Teaching entrepreneurship is a challenge for most of the professors from non-business faculties, where the development of soft skills should be combined with a proactive approach of changing mindsets and attitudes. Entrepreneurship programmes, including advisory and outreach services, should be expanded to equip owners of SMEs with new and improved management and business practices and methods in production, quality improvement, marketing and distribution to raise productivity, efficiency and profitability as well as to commercialize and market innovative ideas. Using Assessment Framework for Promotion of Entrepreneurship education in 5 selected Southeast Asian countries, namely, Indonesia, Malaysia, Philippines, Singapore, and Thailand, analysing published articles from 2007-2017. This paper also analyses entrepreneurship education and the development of entrepreneurship education and the development of entrepreneurial context of the 21st century.

Keywords: Entrepreneurship education, higher education, Southeast Asia.

LEADERSHIP STYLES AND QUALITY IN UNIVERSITIES: EVIDENCE FROM CHILE

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Abstract

The aim of this work is present an exploratory analysis about the relationship between leadership styles and the quality of university careers from universities of Chile. We work with a sample of 42 academic units belonging to four Chilean universities. For this purpose, an exploratory study was carried out in four Chilean universities. MLQ Bass and Avolio questionnaire to 42 academic leaders were conducted, which were processed and analyzed according to quantitative design by the regression model. The findings show that transformational, transactional and passive avoidance leadership styles together explain 65.6% of the quality of university careers. Finally, in this exploratory research, preliminary evidence of the relationship between transformational leadership and career quality is discovered and the scope and implications of these findings are discussed.

Keywords: Leadership, universities, higher education, quality.



Posters

TEACHERS AND STUDENTS

PERCEIVED SELF-EFFICACY OF MENTORS ACCOMPANYING BEGINNING TEACHERS IN AN INDUCTION PROGRAM IN CANADA

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Abstract

Mentoring is the most popular strategy to help new teachers cope with and overcome the challenges associated with entering the profession (Strong, 2005). However, taking on the responsibilities of a mentor is not an innate skill and it is imperative that mentors receive professional support to develop their skills (Stanulis, Brondyk, Little and Wibbens, 2014). Some aspects concerning the professional development of these teachers have, however, been little addressed by the research, in particular their self-efficacy (Bandura, 1977), which nevertheless is a concept strongly linked to motivation and performance at work (Gibson and Dembo, 1984). The objective of this research was to develop knowledge, which is virtually non-existent at the present time, about the sources of self-efficacy in teachers acting as mentors and the process by which they are able to increase and maintain this self-efficacy. To do so, a single case study was used and eleven mentors from elementary and secondary school involved in an induction program in Ontario, Canada, participated in a semi-directed individual interview. The data was analyzed by using the inductive method of Blais and Martineau (2006) and the results will be communicated during the presentation. This communication, in addition to presenting mentors' sources at the origin of their self-efficacy and strategies for maintaining it, will explore avenues for developing training and coaching that meet the specific needs of mentors and how to maximize their competence and success in already existing mentoring programs.

Keywords: Mentoring, mentor teachers, induction program, beginning teacher, self-efficacy.

A SURVEY OF THE STUDENTS' PERCEPTION OF THE VALUE OF UNDERGRADUATE PHYSICS PRACTICALS AT A SOUTH AFRICAN UNIVERSITY

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Abstract

For the conductance of physics practical at the University of Johannesburg, use was made of one of the seven technologically enhanced laboratories. A software embedded system is used to assess the students' results. Once the students submit their results, their results are captured by the data capturer and fed into the software system and the results are simulated for comparison with the background readings. To appreciate the scientific value of these experiments and its offerings, a modified questionnaire, developed by Deacon & Hajek (2011) has been used to determine whether the students consider their laboratory experiences as meaningful and valuable. A questionnaire survey has been administered to 100 first year university students engaged in a physics disciplined study. Included in this questionnaire, is an open question section, which explores aspects of the physics offering that are in favour or disfavour to the students. A Likert-type scale was used to analyze the results. The framework used for this study, is taken from the work developed by the American Association of Physics Teachers (AAPT), which highlights goals to be achieved in a physics laboratory. The results reveal that students have a positive attitude towards physics practicals and appreciate the value of the technologically advanced laboratory.

Keywords: Laboratory, software, practicals, value and experiments.

TEACHING BETTER READING SKILLS IN VOCATIONAL TRAINING: WHAT REFLEXIVE JOURNALS REVEAL

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Abstract

Secondary vocational training (VT) teachers expect students to have the necessary reading skills to meet curriculum demands. These expectations are contradicted by the growing number of students who lack self-sufficiency in reading and who experience considerable difficulties. Our research-action training project aimed to improve reading comprehension of printed and digital texts by VT students (secretarial, accounting, computer support). It also aimed to document the adoption of a proven reading comprehension teaching approach: Reading Apprenticeship (RA) (Schoenbach, Greenleaf, & Murphy, 2012). Nineteen teachers were trained in this approach, which they applied in their classrooms with their students. During the two years of research-action, the teachers were supported by a researcher from the team who provided feedback on their descriptive and reflexive journals (92 entries in total). Qualitative analysis of the journals was carried out along two dimensions: the dimension relating to the RA approach, and the reflexive dimension. The results refer to various modalities of adopting the approach, from improvements and adaptations, to frequent modeling of high-level reading strategies, to wide variety in the grouping of students for collaborative reading, and to extensive use of the gradual release of responsibility model as student progress was observed.

Keywords: Reading, vocational training, teaching, reflexivity, qualitative research.

PROFESSIONAL WELL-BEING: THE POINT OF VIEW OF PHYSICAL EDUCATION TEACHERS

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Abstract

This research project initiates an ideological and scientific shift to study and better understand the contextual, physical, psychosocial and pedagogical determinants that optimize teachers' professional well-being. Contrary to the problem-oriented scientific tradition, our study seeks to discover how a teacher can create, maintain or return to a state of professional well-being. To this end, the project proposes a research objective described as identifying teachers' representations regarding the "optimal functioning" conducive to professional well-being. First, the research protocol targets teachers in physical education, insofar as they are now recognized as leaders and models in promoting healthy lifestyles in schools and communities (MEQ, 2001). This approach allowed us to draw an integrative portrait of these teachers' professional well-being. The methodology will involve 17 focus groups consisting of 136 teachers' professional well-being, 2) to identify the contextual, psychosociological, physical and pedagogical determinants that optimize professional teachers' well-being, and 3) to propose methods and tools promoting knowledge transfer to practitioners and decision-making stakeholders. Through this unprecedented approach, we hope to enhance the value of the profession, foster the pursuit of professional careers and the motivation of teachers and thereby promote the educational success of students.

Keywords: Professional well-being, teacher education, physical education, focus group.

A STUDY OF VOCABULARY LEARNING STRATEGIES USED BY HIGH AND LOW PROFICIENCY EFL LEARNERS

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Abstract

The study aims to investigate the most and least frequently used vocabulary learning strategies by high and low proficiency EFL learners and to find out a relationship between EFL learners' proficiency levels and their use of vocabulary learning strategies. The subjects were 60 randomly selected first-year students from Chulalongkorn University. They were divided into two groups based on several scores. Both groups were determined by their scores of at or above 1 SD and below -1 SD. The instrument validated by three experts was a 25-item questionnaire adapted from Schmitt's Taxonomy. The questionnaire was tried out with a comparable group as a pilot survey to evaluate its reliability. Descriptive statistics and Independent t-test were used to analyse the data.

The results showed that in both groups, determination was the most widely used strategy. The strategy used the least by the high group was the cognitive strategy while memory strategy belonged to the low proficiency group. Furthermore, regarding strategies, watching and listening English language media, such as songs, movies, and even news was the most frequently used strategy by high proficiency learners. In contrast, using a bilingual dictionary was the most often used by low proficiency learners. The study also found that the use of lexicon learning strategies did not have much significant difference between the high and low proficiency groups except for certain strategies such as watching and listening English language media.

Keywords: Vocabulary learning strategy, proficiency, EFL learners.

CLASSROOM MANAGEMENT IN PHYSICAL EDUCATION: WHAT AND HOW?

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Abstract

In the wake of the 2001 school reform in Québec (MEQ, 2001), teaching practices changed significantly (Stoloff, 2016). During the past decade, teachers have struggled to adapt to the new orientations, particularly as regards the educational approach promoting student responsibility and the effects on classroom management (Archambault and Chouinard, 2009). In physical education and health (PE), a complex discipline with varied environments, few studies have examined the appropriate practices to adopt. This project aims to better define current practice and help PE teachers improve the quality of their "classroom management". Three research objectives were formulated as follows: (1) draw a picture of stated practices, (2) document the relationship between teachers' beliefs and practices, and (3) describe the variables that apparently affect the type of practice. The methodology was based on the Q-PEPS questionnaire (Couturier Cormier, 2017), which comprises three sections: sociodemographic characteristics (8 items); beliefs (8 items); and instructional practices (43 items). A sample of 328 respondents (205 men, 123 women, age = 41.3 ± 9.4 years) enabled confirmatory factor analyses. The findings describe 1) a new model composed of four descriptive components detailing classroom management practice during PE lessons: latitude, ambiance, learning situations and assessment; 2) distinct categories of belief and associated practices; and 3) the sociodemographic variables that affect practices.

Keywords: Classroom management questionnaire, physical education teachers, beliefs, practice.

SCHOOL GARDENING AS SCHOOL COMMUNITY ENGAGEMENT AND ACADEMIC SERVICE LEARNING PROJECT

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Abstract

The purpose of this study was to review school garden projects that have been implemented in a school district in the U.S.A. as a part of school community engagement and academic service-learning projects. This study was to describe how school farms or school gardens started and developed in the U.S.A. through a review of a wide range of empirical research studies on school gardens. Most of the school gardens were for students to adapt their learnings in the classroom and apply knowledge in practices. Through school gardening projects, teachers and school staff provided opportunities community members with less expensive vegetables and plants, which is beneficial to students who live in the area of fresh food shortage. In addition, school gardens were used for educating school children and their families, preventing illness, and promoting public health. Students could learn about nutrition and adapt what they learned in the classroom to the real world. School gardening was found to be good for students' mental health through physical activities. Students can obtain academic credits as a part of academic service-learning as well. Parents and school community members can have opportunities to participated in school activities. Implications that how school gardens and farms can be applied in Korea and other countries are suggested.

Keywords: School gardens, school community engagement, academic service-learning.

"LAYERED LEARNING" IN INTER-PROFESSIONAL EDUCATION: THROUGH THE LENS OF STUDENT FILMMAKING

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Abstract

This presentation examines pre-service teacher education within the context of "layered learning", a pedagogical design principle developed to support multiple and diverse learning outcomes within a single learning activity. Typically, individual student learning is the focus of analysis. However, this research highlights the process of inter-professional collaboration when pre-service teachers and human services professionals (preparing to work with youth and families in community-based agencies) collaborate to support each other and contribute to student's academic and social-emotional learning outcomes in a classroom setting. Participants included a class of eleven students attending an alternative high school in the United States, their principal, two university faculty ten pre-service professionals enrolled in either a teacher education or human services professional degree program and a filmmaker. High school participants spent 8-weeks (15-sessions) producing films about student engagement and learning at their school following the theme of "making learning visible". Planning, filmmaking and debrief sessions were recorded and transcribed. Results of qualitative analyses presented here focus on inter-professional discourse tied to planning for and implementing layered learning, student engagement during the course of the filmmaking process and instances of cross-professional learning resulting from this experience. Results are presented in the context of designing new models of teacher education that support layered learning and the development of collaborative and reflective inter-professional practitioners.

Keywords: Filmmaking, human services, inter-professional, pedagogy, pre-professional.

LEARNERS' VIEWS OF THE TEACHER ATTRIBUTES IN CONTRIBUTING TO MEETING THE CHALLENGES OF THE CAPS CURRICULUM IN PHYSICAL SCIENCE

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Abstract

A decline in learner performance over the years in Physical Science at grade 12, in the transition from National Senior Certificate (NSC) to Continuous Assessment Policy Statement (CAPS), have implored us to do an investigation of the perceived attributes of the teacher in meeting the challenges imposed by the new CAPS curriculum. A total of 150 university students participated in this study. Learners were requested to give their views about their teachers on a questionnaire designed to elicit characteristics of a successful teacher. Learners were requested to indicate their degree of agreement or disagreement to each of the items of the questionnaire, on a 5-point Likert type scale of evaluation. The data was subjected to the Principal Component Analysis (PCA) procedure by use of the SPSS program, which revealed 3 broad clustered characteristics of the teacher. These characteristics are Teacher efficacy, Teachers' efficiency, effectiveness, and Teachers' understanding of CAPS curriculum. The results reveal that the teachers' frequent and immediate feedback on the quality of their assessments is considered the most important attribute about a successful teacher, while the use of active forms of learning is an area of concern for the present day teacher in meeting the challenges imposed by the CAPs curriculum for Physical Science.

Keywords: Physical Science, curriculum, teacher, demands and engaged.

INVESTIGATION AND ASSESSMENT OF STUDENTS' MANIPULATING DATA AND CHANCE ABILITY

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Abstract

US Department of Education and Apple, Cisco, Microsoft, Dell and other companies co-founded twenty-first century key competencies Union, that the twenty-first century the most critical capabilities needed for: learning and innovation ability, information, media and technology literacy, work and life skills. Key competencies in information literacy included data interpretation and the prediction of possibility, which has a critical impact for the decision of problem solving. Numbers is the main medium of information in the pursuit of electronic-century. Statistics and probability is the most important tool for interpretation and analysis of digital information. To cultivate the ability of data analysis, interpretation, and the prediction and judgment of event probably occurring is the prior knowledge of statistical literacy in elementary and junior high school. Therefore, this study intends to compile a set of crossing grade assessment with reliability and validity. The assessment and its duplicate norm tests suit to evaluate the students' ability of data and chance in order to assess their development in the second stage(third and fourth grade), third stage(fifth and sixth grade) and fourth stage(seventh and eighth grade). In addition to, the project investigate the ability difference of data and chance with international students. The research results will be an important basis for curriculum development, teachers' instruction as well as evaluation of students' ability of data and chance. The report is the first year result which had finished pretest data analysis. The finding is that the test had good content validity. Items spread reasonably well along the latent ability and are aligned with various ability levels. The test has satisfactory person separation reliability.

Keywords: Statistical literacy, data and chance, ability assessment tool.

TELE-MEDICAL EDUCATION USED TO TRAIN HEALTH PROFESSIONALS IN TIBET, CHINA

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Abstract

It has been an important policy of the Chinese government to provide aid and assistance for the development of Tibet, a high-altitude remote minority area in China. With nearly one-eighth of China's total land areas and about 0.002% of China's total population, the Tibet Autonomous Region lags behind the domestic average level in medical education and is in bad need for medical professionals. The West China Center of Medical Sciences (WCCMS) of Sichuan University has managed to introduce a tele-medical education project to transmit medical courses in a real-time and interactive way. Based on this system, WCCMS has established a model for assisting the Tibet University Medical College through transmitting medical courses, training their medical faculty, sending WCCMS faculty to work in Tibet and admitting medical teachers and students from Tibet to receive high-quality training at WCCMS and its hospitals. Up to date, over 3000 academic hours of 15 medical courses have been provided through this system, where 200 Tibet medical students benefited, most of whom are now working in Tibet. 30 Tibet medical students have completed their residence training at WCCMS hospitals and 41 Tibet medical teachers have received postgraduate training at WCCMS. Over 600 audio-video medical education materials are provided to Tibet Medical College.

Keywords: Tele-medical education, health professionals training, West China center of medical sciences of Sichuan university, Tibet medical college.

ENTREPRENEURIAL SCHOOL: A PLATFORM FOR REALIZATION OF INTERDISCIPLINARY PROJECTS

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Abstract

Entrepreneurship education appears to be a promising avenue for developing entrepreneurial skills among young people. This tendency is present in several countries and environments, and the school is targeted in order to give tools and develop entrepreneurial spirit among young people because these are considered as key players in promoting economic growth (European Commission, 2013). The appropriate teaching method for achieving academic and entrepreneurial goals seems to be the project-based approach (MELS, 2005). The project-based approach is also the prioritized strategy to implement interdisciplinary in schools (LeDoux, 2003) and it appears that entrepreneurship is a privileged context for the realization of interdisciplinary projects in order to give meaning to the learning experience (Pépin, 2011). Based on the framework of Proulx (2004), the objective of this study is to describe the processes of implementation and deployment of interdisciplinary projects in the context of the entrepreneurial school. Eight individual interviews were conducted with school staff from an entrepreneurial school where several interdisciplinary projects were going on. Our results show that the teacher assumes a key role as a supervisor throughout the interdisciplinary project in making sure that the education program objectives are attained. However, the lack of collaboration between the teachers remains a challenge in order to equip and help them with the realization of the interdisciplinary project. As the implementation of interdisciplinary projects represents a non-traditional teaching method, solutions are identified to ensure sustainability the implementation of these projects in this entrepreneurial context.

Keywords: Interdisciplinary, project-based learning, entrepreneurial school, qualitative methodology, case study.

PARENTAL SENSE OF COMMUNITY AND PERCEPTION OF EDUCATIONAL COMMUNITY: THE MEDIATING ROLE OF SOCIAL COMPETENCE

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Abstract

This study examined parental social competence as mediators in links between sense of community and perception of educational community. Participants were 422 parents with elementary school student. Variables measured in this survey were self-reported social competence, sense of community and perception of their child's school as educational community. Descriptive analysis, correlations analysis, and the multiple regression analysis for research model test were used. Additionally, Sobel test was used to verify the significant mediating effect. The results were as follows. First, it showed sense of community and social competence were positively correlation with perception of educational community. Second, sense of community significantly influenced on social competence and perception of educational community. Third, the results of Sobel test showed evidence of partial mediation involving parental social competence. Findings suggested parent education to support parental social competence could help make them aware of their child's school as educational community. Based on these results, we implemented a learning community with parents focused on social competence as part of a parent education program for building educational community. As we expected, the findings of this practice were parents participated in this learning community improved on their sense of community. Further, they experienced 'understanding that society needs to be community', 'understanding parental roles for raising children as community member', and 'self-exploration for acting as a community member.

Keywords: Sense of community, perception of educational community, social competence, parents with elementary school, parent education.

IMPROVING THE SOCIAL INCLUSION OF DISADVANTAGED LEARNERS BY USING A PERSONALIZED SOFTWARE

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Abstract

In this work we present the needs analysis for the target groups of the project TESI - Adaptive Personalized System for Creating Expression Tools in Social Inclusion of Learners with Verbal Communication Disabilities: the users (people with verbal communication disabilities, who will use the software to compensate their communication deficiencies by expressing themselves using graphical symbols and annotations) and the tutors (people who work together with the users, and who will create personalized instruments for their users). The basic characteristics of the target groups were studied and a pedagogical-psychological profile prepared. They will help us to build a conceptual model, corresponding to the age, abilities and specific needs of the group, for which TESI system will be developed.

Keywords: Social inclusion, m-learning, disadvantaged people, new project.

CHALLENGE IN CLASSROOMS: MORAL REASONING AND EMOTIONAL COMPETENCE

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Abstract

We present here the first fruits of a research focused on pupils in their first year at Secondary School. Its main aim is to explore the possible relation between moral development, as understood by Kohlberg, and the components of emotional intelligence described by Baron-Cohen, drawing on the studies by Bandura, Caprara or Barbaranelli, which stress the impact that lack of emotional components (e.g. self-concept,

empathy, flexibility and control) have on moral detachment. At a cooperative school in the province of Alicante (Spain), following Kohlberg's method and through an action-research design, we have proposed 11 dilemmas and a BarOn questionnaire (EQi:YVTM) to be resolved by a small group of 25 boys and girls (ca. 12-14 years old) during their tutoring session. Obtained results show the whole group at the same level of moral reasoning, but at different sublevels. We have also found that the same individuals who are at lower sublevels obtain lower scores (below the group average) in the four analysed emotional components (intrapersonal level, interpersonal level, stress management and adaptability). Use of moral dialectics in the classroom promotes cognitive progress, social responsibility and decision making at a critical evolutionary moment.

Keywords: Secondary school, moral development, emotional intelligence, early teenage.

PREPARATORY STUDY OF INDIGENOUS EDUCATION THROUGH TRADITIONAL COLOR NAMES

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Abstract

Towards starting a new project of indigenous education through learning traditional color names, preparatory questionnaire survey was conducted. A hundred and thirteen undergraduates answered their knowledge of ten Japanese traditional color names, motivation of learning them, appreciation of cultural value of them, participants' domestic and international interests, and cultural items they think to be proud of. Results were analyzed by data-mining procedure using the Self Organizing Map (SOM) and 4-cluster solution was obtained, one of which was interpreted as 'tradition-conscious' group and the other one 'low motivation' group. In addition, correlation analysis showed possible sex difference in the way of understanding traditional color names. These findings may give us a clue to design next-step investigation for developing a model of efficient indigenous education program.

Keywords: Indigenous education, traditional color names, Self Organizing Map (SOM).

EFFECTS OF USING VIDEO MODELLING WITH HANDHELD DEVICES ON SOLVING MATH PROBLEMS ABILITIES OF THE STUDENTS WITH INTELLECTUAL DISABILITY IN ELEMENTARY SCHOOLS IN TAIWAN

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Abstract

This study aimed to investigate the effects of using video modelling with handheld devices on solving math problems abilities of the students with intellectual disability in elementary schools. Two participants with intellectual disability placed in the resource classroom of an elementary school in Taichung City in Taiwan were selected in this study. The research method has used single subject designs. The independent variable was the video modelling teaching strategies and the dependent variable was the solving math problems abilities of students. The study lasted for about ten weeks, two times of intervention or observation per week. The collected materials were analysed through visual analysis.

The results of this study were as follows:

1. The video modelling with handheld devices give rise to the solving math problems abilities of the students with intellectual disability.

2. The video modelling with handheld devices maintain the solving math problems abilities of the students with intellectual disability.

According to results, discussions and limitations of this study, as well as some suggestions for the teaching and further studies were made.

Keywords: Students with intellectual disability, video modelling, solving math problems abilities.

THE USE OF IPAD FOR SUPPORTING INSTRUCTIONAL PRACTICES IN VOCATIONAL EDUCATION AND TRAINING CENTERS: SEARCHING FOR EFFECTS ON STUDENTS ACHIEVEMENTS

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Abstract

Despite the lack of studies that shows the effectiveness and sustainability of Educational Technologies, the emphasis on them has been encouraging a lot of Italian policymakers to adopt mobile devices (e.g. tablets) in instructional practices of education and training (Avvisati, Hennessy, Kozma, & Vicent-Lancrin, 2013; Pellerey, 2015). In the last years, in Italy, a lot of pilot projects on the use of technologies for supporting of instructional practices have been implemented in general school and Vocational Education and Training (VET) system. The present exploratory study aims to compare the learning outcomes of a group of VET students which used iPad in the classroom with a group of students of the same VET centers which did not use it. 400 VET students from five VET centers were involved. The researchers gathered data about the final exam of the third year students. Specifically, the grades of the common general subjects (i.e. italian, mathematics, and english) were collected. Gathered data were analysed with a quantitative approach. Results show that the correlation between the use of iPad and the students outcomes is different depending on the general subject taken into account. While there is no correlation with what concern italian and mathematics grades, the one with english subject seems to be better. The findings represent the exploratory phase of a wider research project. Thus, new data collection and analysis will be carried on in order to better understand which factors affect students' achievements when they are involved in instructional practices supported by technologies.

Keywords: Educational technologies, iPad, VET, students achievements, exploratory study.

INVESTIGATION OF USING VIDEO MODELING TO IMPROVE THE MATH PROBLEMS SOLVING SKILLS OF INTEGER MULTIPLICATION AND DIVISION OF THE STUDENTS WITH LEARNING DISABILITIES IN ELEMENTARY SCHOOLS IN TAIWAN

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Abstract

The aim of this study was to investigate the effect of video modeling on math problems solving skills of integer multiplication and division of Students with learning disabilities in elementary school. This study adopted multiple probe design across subjects of single subject experimental design. Three participants with learning disabilities were third grade in elementary school. The independent variable was Video Modeling. The dependent variable was the correct items that students answered on the Assessment of integer multiplication and division word problems. The content of instruction includes four units.

All collected data were analyzed by visual analysis and the C statistic. In addition, the results of an investigation form teacher and participants, and researcher's records were used for the supplementary explanations of results. The results of this study were concluded as follows:

1. Video modeling had immediate effective for the elementary school students with learning disabilities to solving word problems of integer multiplication and division.

2. Video modeling had maintenance effective for the elementary school students with learning disabilities to solving word problems of integer multiplication and division.

3. Video modeling had generalization effective for the elementary school students with learning disabilities to solving word problems of integer multiplication and division.

4. Teacher and participants all held positive attitudes toward using video modeling in the instruction. Recommendations for future practice and research was provided.

Keywords: Video modeling, learning disability, integer multiplication and division word problems.

A QUIZ TOOL FOR A GENERAL LOCATION-BASED M-LEARNING FRAMEWORK

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Abstract

Nowadays, most educational spaces such as museums, botanical gardens, and cultural heritage sites are using digital technologies to provide an enhanced experience for visitors. Technologies such as mobile apps, interactive electronic displays, augmented reality systems and robotic guides can be very effective in supporting learning by providing supplemental information and enabling novel ways for visitors to engage with the content. On the other hand, these systems may require special equipment, be expensive to develop and install, and are most often purpose-built to support just a single space. We have taken a different approach and developed a general extensible framework for building location-based mobile learning (m-learning) systems. The framework supports various object/place identification methods (QR code, NFC tag, Bluetooth beacon, object recognition), numerous types of media, and multiple content languages and user levels (e.g., adult, child). In this poster, we introduce and demonstrate a new quiz feature for the framework. The quiz system includes a web-based content management system for administrators to enter multiple questions and answers for each object or display. An Android-based mobile app on the visitor's own phone keeps track of the objects and areas visited, and then serves the visitor a personalized quiz. This quiz feature may be used to incentivize user interaction, to assess learning, and to gather data on visitors' preferences and behavior. However, its primary novelty is in its generic nature: it requires no special equipment, and the same system can be deployed at any site; only the content changes.

Keywords: m-Learning, location-based systems, museum technology, mobile computing.

TEACHING AND LEARNING

RESEARCH ON TEACHING AND LEARNING IN SICHUAN UNIVERSITY'S IMMERSION PROGRAM, CHINA

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Abstract

University Immersion Program (UIP) of Sichuan University (SCU), has been held six consecutive years since 2012. This program is a significant step for SCU to achieve the goal of building a world-class university. UIP, the two-week short-term program has been playing a major role in implementing internationalized education and nurturing globally competitive talents through inviting foreign professors or specialists from world-ranking university or institutes to offer English-based specialized or general courses and launching international camps these years. Research methods such as questionnaire survey were used to explore current situation and influenced factors of teachers' efficacy and undergraduates' internationalized quality. In order to research on teaching and learning of UIP, all foreign teachers taught in 2016 UIP and 839 undergraduates of 2017 UIP randomly selected are research objectives. Findings reveal the following facts. Firstly, teachers' general efficacy is higher than teachers' self-efficacy and their teaching efficacy is significantly influenced by their teaching age, job title, and whether they have participated in previous UIP. Secondly, at the end of UIP, there are significant differences between the students' internationalization attitude, internationalization knowledge, and internationalization ability. Corresponding countermeasures are proposed to promote teaching and learning of UIP, such as optimize the curriculum; improve the organization and strengthen the UIP management; improve teaching management and ensure implementation; monitor the quality of teaching.

Keywords: University immersion program, teachers' efficacy, students' internationalized quality.

SENSITIZATION TRAINING AND HEALTHY ENVIRONMENTS: IMPACTS PERCEIVED BY THE STAKEHOLDERS

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Abstract

Obesity is a growing problem that is directly related to a sedentary lifestyle and an inadequate diet (WHO, 2014), and influenced by physical, sociocultural, economic and political environments (Hill et al., 2003). To raise awareness of the issue, numerous initiatives in health education whose sensitization sessions were held across Quebec to sensitize stakeholders to ways of facilitating healthy environments to promote an active lifestyle and healthy food choices. Using a qualitative approach, the 2006 model of Kirkpatrick and Kirkpatrick served as a theoretical and methodological guide to the study. The objectives were to 1) explore the knowledge and skills acquired during the sessions and 2) examine the transfer from sessions to concrete actions for fostering environments conducive to healthy lifestyles. Individual interviews were conducted with 52 stakeholders (F=41; M=11). The results reveal, first, that most of the stakeholders consolidated or even improved their knowledge and skills and were better able to recognize the four types of environments in their respective workplaces. They developed a common vocabulary and a better understanding of the relationship between environments and lifestyles. Second, the transfer was more problematic because the concerted actions needed to facilitate healthy environments are complex. These results will be discussed in light of Kirkpatrick and Kirkpatrick's four-levels pyramid, in which the fourth optimal level - organizational results - presents greater challenges in terms of impacts. The sensitization sessions can be viewed as a societal project encouraging influential stakeholders to develop environments favourable to healthy lifestyles and as a health education initiative.

Keywords: Healthy environments, sensitization sessions, stakeholders, impacts.

AN INSTITUTIONAL STRATEGY TEMPLATE TO OPTIMALLY ENHANCE THE EMPLOYABILITY OF STUDENTS THROUGH WORK INTEGRATED LEARNING

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Abstract

This article describes the development of an institutional strategy template that can be used to optimally enhance the employability of students through Work Integrated Learning (WIL). Literature contain numerous studies which confirm the link between Work Integrated Learning (WIL) and the employability of students. What is not clear is what can be done to ensure that the contribution of WIL towards the employability of students is optimised. This article represents the results of a study at a university in South Africa to answer this question. A quantitative study was conducted and includes the views of 118 employers as the ultimate judges of employability. It was empirically determined that WIL enhances the employability of students together with an ideal bucket of skills and qualities that employers need together with specific recommendations on how to optimise the contribution of WIL to attain those skills and qualities.

Based on these results a decision was taken at the Central University of Technology, Free State (CUT) in South Africa that all learning programmes would have a compulsory component of WIL in future. The goal was therefore to analyse and structure the WIL component in such a way that the employability of CUT students could be optimised through the comprehensive and effective application of WIL, for which the development of an institutional strategy template for WIL was required. Such a template was developed and is presented in the article.

Keywords: Work-integrated learning, employability, strategy, development, students.

PERCEIVED ACCEPTANCE OF FAMILY ON BINGE DRINKING AND CANNABIS CONSUMPTION AMONG SPANISH UNIVERSITY STUDENTS

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Abstract

The use of legal and illegal drugs has increased substantially in the university population. Binge drinking (BD) is a common pattern of alcohol consumption in Spanish university students. Cannabis is the most widely consumed illegal drug among those BD students who also take illegal drugs. Recent research has shown that received social support from family acts as a protective factor for illicit drug use in the university population. However, few studies have analysed the link between perceived social support from family and drug use in university students. In this study, we compared groups of university students in relation to alcohol/drug consumption and perceived sense of acceptance from family, a key component of perceived social support. Data were obtained from 484 first-year university students (268 females and 216 males). Participants were classified in three groups, controls, binge drinkers and binge drinkers who used cannabis (BD-CA) on the basis of the scores obtained in the Alcohol Use Disorders Identification Test (AUDIT) and responses to questions on alcohol and cannabis use. Perceived sense of acceptance was measured using the Perceived Acceptance Scale (PAS). Analysis of the data revealed a higher level of perceived sense of acceptance from family in the controls and BD than in the BD-CA users. Differences between females and males were only observed in the BD-CA user groups, in which females showed lower perceived sense of acceptance from family than males. Future research should widen the research to include other aspects of socialization, especially in peer groups.

Keywords: Binge drinking, cannabis consumption, gender, first-year university students, perceived sense of acceptance.

IS THE PEN STILL MIGHTIER THAN THE KEYBOARD FOR WRITING? A COMPARATIVE STUDY IN ELEMENTARY SCHOOL

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Abstract

Learning to write presents a significant challenge for elementary school pupils, as it represents a complex activity involving cognitive aspects, such as writing processes and strategies. ICTs may provide new avenues to help pupils in this regard. Indeed, it has been observed that computers are increasingly used for classroom writing activities, both to improve writing skills and motivate pupils to write. Yet very few studies have compared the effects of using a keyboard versus pencil and paper at the elementary school level. Moreover, existing studies use different indicators of performance, inevitably leading to different conclusions. This study aimed to compare the effects of two writing modes, keyboard versus pencil and paper, on the writing performance of children in elementary school.

Pupils in Grades 2, 4 and 6 (N=255) were assigned two different writing tasks, each under two different conditions: using a keyboard and using a pencil and paper. Their writing performance was evaluated for each condition. Results (t tests) show that pupils wrote faster and produced better quality texts when using a pencil and paper. When pupils were allowed to use a spell check program, only the lexical spelling scores of those in Grades 4 and 6 were higher when they used a keyboard versus pencil and paper.

Keywords: Keyboard, handwriting, writing performance, elementary school.

BINGE DRINKING, CANNABIS CONSUMPTION AND ADAPTATION TO UNIVERSITY IN SPANISH STUDENTS

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Abstract

Adjustment to university is a complex multifaceted construct of academic, social, personal-emotional and institutional demands that require a variety of coping strategies involving many factors other than academic performance. Some students find it difficult to adapt to university and may resort to drug abuse as a compensatory mechanism for coping with the associated stress. This is an important topic because poor adjustment in the population at risk may lead to a rise in university attrition rates. The main purpose of this study was to analyze adjustment in first-year university students in relation to binge drinking (BD) and cannabis use. A sample of first-year university students (182 male and 227 female) was assessed using the Student Adaptation to College Questionnaire (SACQ). Patterns of drinking and cannabis (BD-CA). Analysis of the data revealed an association between patterns of drug/alcohol use and academic adaptation to university. The BD-CA students showed greater difficulties in terms of academic adaptation than the controls, and the response was similar in females and males. Future studies should examine more closely whether poorer academic adaptation to university in students who consume both alcohol and cannabis affects their academic performance and/or their decision to drop out of university.

Keywords: Binge drinking, cannabis consumption, first-year university students, SACQ.

PROBLEM-BASED LEARNING AS A MOTIVATING STRATEGY FOR STUDYING METABOLISM

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Abstract

Metabolism, its regulation and its integration is one of the most complex study subjects for Biochemistry students. In fact, its learning is perceived as a demanding and difficult task by undergraduate science students, and only few of them achieve an integrated and deep learning of the subject. Problem-based learning (PBL) can be used as a motivating didactic strategy. It is still a relatively innovative tool in Spanish universities to be applied for the study of fundamental topics in biochemistry.

We are currently involved in an Educative Innovation Project (PIE17-145, funded by University of Malaga) aimed to improve the teaching practice of Metabolism to undergraduate students. Within the framework of this Project, PBL has an important role in broadening a more active role of the students, making them more responsible for their own-learning and promoting a more positive and interested attitude to Science.

Following a *design-based research* methodology we are currently developing new metabolism cases of PBL applied to different groups of biochemistry and biology undergraduate students. First perceptions of the PBL application indicate that students find this educational strategy demanding and challenging, but also very helpful to improve their skills and aptitude in the learning of the fascinating but complex metabolic integration.

Keywords: Problem-based learning, design-based research, metabolism, biochemistry, higher education, science education.

THE DIFFERENCES OF THE FAMILY STRENGTH ACCORDING TO CLUSTER TYPES BASED ON THE FAMILY RITUAL OF FAMILIES WITH CHILDREN IN EARLY CHILDHOOD

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Abstract

This study examined the differences of family strength according to cluster types based on the family ritual (occurrence, roles, routine, attendance, affect, symbolic significance, continuation, deliberateness) of families with children in early childhood as the crisis of family community in Korea society deepens. For the purpose, a survey was conducted targeting 255 families with children in early childhood in Korea. The analysis methods of descriptive statistics were one-way ANOVA, hierarchical cluster analysis, K-means cluster analysis. The results showed that 1) the cluster analysis on family ritual revealed five clusters: 'Rich and flexible sufficient use group', 'Sufficient use group to pursue meaning', 'Role sharing complementary need group', 'Rigid complementary need group', 'Inconsistent unused group'. 2) There were significant differences of family strength factor (bond, communication, problem-solving ability and share value system between family members) according to cluster types based on the family ritual. This study provided implications for the practice of family ritual and a parent education program for empowering family strength.

Keywords: Family with children in early childhood, family ritual, family strength, cluster analysis.

A PRACTICE PROJECT TO PREVENT THE COOKBOOK MODEL AS MODUS OPERANDI FOR BIOCHEMISTRY LABORATORY LEARNING

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Abstract

Laboratory learning is a crucial component of chemistry and biochemistry instruction and should be conceived as a way to develop students' reasoning, technical or practical skills, introducing them into the scientific method principles. Nevertheless, the heavily criticized "expository instruction style", characterized by a cookbook nature, is still the most widespread style of laboratory instruction in our universities. Alternative learning styles based in the inquiry, discovery and problem-based pedagogical approaches, have been reported to promote students' problem solving skills, critical thought and self-confidence development.

We are currently involved in the Educative Innovation Project PIE17-065, funded by University of Malaga, aimed to improve the teaching practice of Biochemistry laboratory to undergraduate students. Based on an enzymatic analysis of glucose in soft-drinks we have developed a laboratory protocol as a part of a full practice project where students must work before and after the lab session, in order to prevent the cookbook model as modus operandi, therefore preventing the situation where the students get a first glimpse of the experiment protocol whereas they put on their lab coat. The learning activities have been designed to move our students from the passive role that characterizes the step-by-step procedures, to an active and critical attitude that starts before and remains after their laboratory session, also minimizing time, space, and equipment resources. Our results have shown that this experiment has improved the learning of both, future biochemists and chemists, which showed a very positive perception of the whole practical project.

Keywords: Laboratory instruction, hands-on learning/manipulative, biochemistry, higher education, science education.

KNOWLEDGE OF KOSOVAR ADOLESCENTS IN DETERMINING EMOTIONS BASED ON FEELINGS

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Abstract

Feelings are an essential factor in the lifelong learning process. They play an important role in the development of constructions and personal meanings of reality. Such claim is supported by many other scientific studies. According to Scherer in 2003, emotions play an essential role in interaction societies by carrying out important regulatory functions within the human body and brain as well as facilitating the decision-making process in a rational way (Damasio, 1994, Scherer et al, 2003 Russell et al., 2003; Sander et al., 2005a). One the other side, Picard attaches great importance to the appointment of emotions in 2001 highlighting emotional skills as the ability to recognize, label and understand their feelings and other ones.

Based on the importance of emotions and their impact on our lives, this study aims to measure the knowledge of Kosovar adolescents on emotions and nature. The results of this study are based on the feedback of 96 adolescents aged 15- 21 years old (75% of them were aged 15-18 years). The data were collected through a self-designed questionnaire for measuring the emotional knowledge that matches the basic feelings. The questionnaire contains a total of 7 basic feelings accompanied by 32 different emotions where the subject is asked to place the appropriate emotions in the field that corresponds to the feeling.

In general, results of this study show that adolescents do not possess enough knowledge about emotions and their nature. However, participants showed satisfactory results in recognizing positive emotions by referring to the feeling of happiness. While none of the respondents have managed to put all the appropriate emotions that coincide with negative emotions, namely being aggression, fear and jealousy.

Keywords: Emotions, feelings, adolescents.

LEARNING CONTRACT, CO-OPERATIVE AND FLIPPED LEARNING AS USEFUL TOOLS FOR STUDYING METABOLISM

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Abstract

Undergraduate students in Biology identify *Metabolic Biochemistry* as a particularly difficult subject. This is due to the fact that students need to interconnect properly all the contents of its syllabus throughout their study of the subject in order to get a global insight of the complex regulatory features controlling metabolic pathways within the metabolic network under different physiologic and pathologic conditions, as well as metabolism as a whole. Due to these objective difficulties, a high percentage of our students face the study of this subject as a very hard task beyond their forces and capacities. This perception leads to high rates of premature dropout. In previous years, less than 40% of all the registered students attended the examinations of *Metabolic Biochemistry* (a subject in the second year of the Degree of Biology at our University). Even worse, less than 25% of our students passed the exams.

From the academic year 2015/16 on, we are developing innovative teaching projects (PIE15-163 and PIE17-145, funded by University of Malaga) aimed to increase our student loyalty to the subject (and hence to increase their attendance to exams) and to help them to learn more effectively metabolism and its regulation. These innovative teaching projects are based on the use of several powerful tools: a learning contract and problem-based learning within the framework of group tasks promoting an actual collaborative learning in a flipped classroom.

Keywords: Learning contract, co-operative learning, flipped learning, problem-based learning, metabolism.

ORGANIZATIONAL ISSUES

A JAMAICA STUDY ABROAD PROGRAM OFFERED AT AN HBCU: WHO, WHAT, HOW

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Abstract

Research has documented the motivation, benefits and barriers of studying abroad (Sanchez, Fornerino and Mengxia, 2006; Sutton and Rubin, 2004; Taylor and Rivera, 2011; Henry, 2014; and Dwyer, 2016). College faculty has advocated study abroad programs to their students as opportunities to become world citizens who appreciate cultural differences. Future employers of 21st century students value many of the skills these students acquire during studying abroad experiences, especially cultural adaptability, flexibility and a greater tolerance of ambiguity.

This poster session showcases a Jamaica Study Abroad Program (JSAP) offered at an HBCU (Historically Black Colleges and Universities). Institutions of higher education in the United States HBCU's serve to educate the African-American community. The three-week intensive summer Jamaica Study Abroad program described here provides participating students with a historical overview of the Caribbean and an understanding of Jamaican culture offering students an opportunity to develop a sense of the sociological, economic, and political realities faced by the peoples of Jamaica and the Caribbean. The accelerated program provides academic enrichment, professional exposure, and cultural insights for participating students and faculty. Lectures/discussions and cultural field trips are geared specifically toward providing background information for the completion of an independent research project and a multimedia project presentation.

This Study Abroad experience affords participating American students academic interactions and cultural immersion with Jamaican students and scholars for the exchange of ideas and discussion of differences. Students leave the program with a better understanding of and greater appreciation for how other people live in the world.

Keywords: Study Abroad, Jamaican Culture, HBCU's.



Virtual Presentations

TEACHERS AND STUDENTS

HOW TO EFFECTIVELY DEVELOP FACULTY MENTORSHIP PROGRAMS

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Abstract

Although higher education faculty positions have traditionally been viewed as autonomous (Desselle & Semsick, 2016), universities/colleges are beginning to offer more mentorship experiences for their faculty members. Through these mentorship programs, faculty are able to enhance their teaching, scholarship, and service commitments. Moreover, mentorship programs often result in faculty having overall higher job satisfaction and gaining a more in-depth understanding of their employment roles and responsibilities. Because of mentorship programs, faculty may be able to create a collegial culture that is supportive of the institution, faculty, staff, and students.

Keywords: Mentorship, faculty development, online education.

BUILDING INTERPERSONAL RELATIONSHIPS IN AN ADULT ONLINE LEARNING COMMUNITY

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Abstract

Online learning communities have become a convenience for some adult learners who want to continue their education at university institutions. The population in the online learning communities is significantly increasing. As a result, instructors research for tools to implement in their online learning communities in order to build interpersonal relationship and promote student success. Building interpersonal relationship is a component for student success. Integrating specific technological components is vital to understanding the intricate dynamics that go into the building and sustaining teacher and student relationships. The study significance provides a confirmation that online communities can be identified as the suitable medium particularly for constructivist online learning and teaching, thus, motivates adult online learners in higher education. The concepts presented in this literature review can therefore be applied in enriching the student learning experience. This paper will establish the importance of building interpersonal relationships and students' success. This paper will explore and share three software applications used in an online adult learning community to build interpersonal relationships and students success. How are the applications used in the online adult learning community?

Keywords: Interpersonal relationships; student success, LOOM, REMIND, ZOOM.

PERCEPTIONS OF SOUTH AFRICAN FIRST YEAR PHYSICS STUDENTS ON THE EFFICACY OF LABORATORY PRACTICAL WORK

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Abstract

Lack of meaningful opportunities for exposure to practical work at various schools in South Africa renders the performance and assessment of physics practical work at university level a daunting task for both students and the academic personnel. This reality can partly be attributed to teachers' lack of confidence in conducting science investigations and lack of resources to perform meaningful practical

work at various schools within the broader South African context. In view of these key practical considerations, first year physics students at a South African university were exposed to tailor-made physics practical work after which a questionnaire was administered to establish their views on the efficacy of laboratory practical work. In terms of the intrinsic requirements of the concomitant academic program enrolled for, students are required to obtain pass credits for both practical and theory modules existing as two separate components. More specifically, the compilation of the experimental report is an arduous task which requires considerable effort and commitment on the part of students for which appropriate assistance with various technical aspects is provided. The students constituted a purposive sample within the context of this study. The students' views on the efficacy of the activities underpinning practical work were largely positive and this augers' well for meaningful development and acquisition of an essential repertoire of practical skills necessary for successful navigation of science studies. The theoretical implications for meaningful enhancement of scientific literacy are discussed.

Keywords: Laboratory practical work, efficacy, practical skills, scientific literacy.

REFRAMING DISCIPLINE: CONNECTING WITH EVERY CHILD

Sylvia Harkins

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Abstract

When children feel valued, accepted and understood, they are more likely to cooperate with adults. Developing a positive relationship with an adult is a difficult task for most children, and sometimes they have no idea on how to develop those relationships. Some children have had a negative experience with an adult, which then translates into challenging behaviors for these children in the classroom. Building relationships in the classroom is essential to establish an inviting, comfortable, safe, and risk taking learning environment in the classroom. This paper will review research that provides practices that reframe discipline in the classroom. Through role-play, table discussions, and creative hands-on activities, the educator will learn to create a safe and inviting learning environment for students for both higher positive experiences and academic achievement. The literature review section identified articles that showed the positive impact of a teacher creating a positive classroom environment. Also, articles on the impact of quality teacher-child relationship were reviewed. The articles utilized were sourced from online search engines and journal databases.

Keywords: Positive classroom environment, teacher-child relationship.

SOUTH AFRICAN SCIENCE STUDENTS' SELF-EFFICACY BELIEFS – A CASE OF PHYSICS LEARNING

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Abstract

This study examined science students' self-efficacy beliefs at a South African university in relation to physics learning as learning is a dynamic process underpinned by a myriad of pedagogic factors. The significance of self-efficacy beliefs stems from their impact on motivational and self-regulation processes. In view of this key imperative, students' self-efficacy beliefs were established through the administration of the Survey of Self-Efficacy in Science Courses – Physics (SOSESC-P) questionnaire. Questionnaire items are categorized according to four key dimensions in the form of Mastery Experiences, Vicarious Learning, Social Persuasion and Physiological State. The students constituted a purposive sample within the context of this inquiry. Analysis of data demonstrated that students' self-efficacy beliefs appeared to be characterized by varied and fragmented views in terms of the four key dimensions specified. The theoretical implications for effective teaching and learning are discussed.

Keywords: Self-efficacy beliefs, physics learning, motivational and self-regulation processes.

INTERPERSONAL FUNCTIONING IN FUTURE PRESCHOOL SPANISH TEACHER

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Abstract

Attachment is an emotional bond between children and their caretakers. For infants and toddlers, the primary attachment figure is usually their parents. This bond develops with the continuous interaction between the child and the caregiver. The early entry of children into school has caused the teacher to become an attachment figure for many children.

A child's attachment style in the classroom is dependent on the behavior their teacher shows towards them, promoting or not an adequate integral development of the students. At the same time, teacher-child interaction quality is influenced by teacher's attachment style. Secure attachment has been shown to positively influence a child's development as well as later successful academic performance.

This study examines the attachment style in 80 future preschool teachers. They are currently enrolled in a Degree in infant education in the Faculty of Education in the University of Zaragoza (Spain). The students filled in "Questionnaire for the assessment of adult attachment" (Melero y Cantero, 2008). This questionnaire combines the scores obtained in four scales (1.-"Low self-esteem, need for approval and fear of rejection"; 2.-"Hostile conflict resolution, resentment and possessiveness"; 3.-"Expression of Feelings and Comfort with Relationships"; 4- "Emotional Self-Sufficiency and Discomfort with Intimacy") in order to obtain four adult attachment styles: secure attachment and three insecure attachment typologies ("hostile fearful", "anxious", and "dismissing").

Main results indicate that: 1) No participant shows a secure attachment; 2) almost half the sample (46.25%) score low or very low in scale number 3. It shows difficulties in interpersonal functioning.

These findings support interventions to promote the ability to express emotions and sociability in future preschool teachers in order to reduce the need for approval and the fear of rejection as well as the need of individuality and emotional self-sufficiency, developing useful conflict resolution strategies. These interventions will promote a secure attachment in future teachers, an enhancing factor for an adequate development of the students.

Keywords: Attachment, infant-teacher relationship, early infant development.

WORK ETHIC OF SOUTH KOREANS FOR LEVELS OF EDUCATION, OCCUPATION, AND EMPLOYMENT STATUS

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Abstract

This study focuses on demographic differences in selected work ethic attributes of South Koreans as measured by the Korean Employability Skills Assessment (KESA). The four factors of the KESA which were *initiative, interpersonal skills, thoughtfulness, and dependability* were compared for levels of education, occupation, and employment status. A total of 941 Korean adults who were 18 years old and above provided usable data. Descriptive statistics, one-way ANOVA with post hoc tests were employed to analyze data collected. Findings suggest that there are statistically significant differences in *initiative, interpersonal skills, thoughtfulness, and dependability* based on education levels; there are statistically significant differences in initiative based on occupations; and there are statistically significant differences in initiative based.

Keywords: Korean employability skills assessment, Korean work ethic, employability skills, one-way ANOVA.

EXECUTIVE FUNCTIONING IN AUTISM SPECTRUM DISORDER: FROM THEORY TO REAL WORLD

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Abstract

Executive functions (EF) encompasses a broad range of cognitive processes that coordinate thoughts, emotions and behaviors during the resolution of novel tasks, including planning, working memory, inhibition, monitoring, generation and flexibility. They contribute to the individual's adaptation to their environment, and allow them to function success-fully in their daily life. Consequently, executive disfunctions result in difficulties in emotional and behavioral adaptation. There is a strong association between deficits in executive functioning and neuropsychological disorders such as Autism Spectrum disorder (ASD). Neuropsychological tests traditionally used to measure executive functioning are poorly adjusted to the demands of real world.

This paper shows the ability of seven children with autism, to apply to the real world the executive skills they have learnt in an executive function training program. Before and after the intervention, parents and teachers were asked to fill out a questionnaire. The rating instrument has been developed for measuring executive functioning in children and it has the advantage of capturing behavior over an extended period of time and in different settings (e.g. home, school...).

The results of the pre-test-post-test analysis in parents and teachers show statistically significant differences in the two questionnaire factors: Total working memory and Total inhibition.

We highlight the need to focus assessment and intervention for people with autism on difficulties in everyday executive functioning in order to achieve a psycho-social adaptation.

Keywords: Adaptive functioning, Autism spectrum Disorder, Executive function, Intervention.

CHILDREN THEORETICAL FRAMEWORK TO LEARN COMPUTATIONAL THINKING

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Abstract

The focus of this paper is on the holistic modular layer model for Education & Training for the 21st Century in the macro competency Computational Thinking, addressed to childhood and adolescence. The concept is taken from primary sources, S. Papert and J.M.Wing, in a sense that isn't technology dependent neither independent. Discussing the "dual" constructivism learning theories (constructivism, constructionism) that best reflex the nature of knowledge in the case of CT. Connectivism is a complementary option that requires further research. CT is a macro competency from which it's possible to develop a 21st Century emerging single competence domain. It's an everywhere everybody competency, that needs to be initiated as early as possible. The crucial point is the teachers' learning, training and guidance. People come first then technology, so it's important to call for the need of Tech Humanism.

Keywords: Computational thinking, 21st century competencies, learning theories, problem-based learning, and tech humanism.

ANALYZING THE IMPACT OF LEVELING MATHEMATICS COURSES OVER STUDENTS' PERFORMANCE IN LATER SUBJECTS

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Abstract

Mathematics is an important requirement in an undergraduate engineering program, it offers core knowledge that engineers must have; however, it is common that mathematics courses of a program are also the most difficult and one of the reasons that many students fail in their studies. A leveling course offers foundational knowledge related with a specific subject that a student must have. In Mexican Autonomous Metropolitan University (UAM for its Spanish acronym), exist a leveling course that provides students with mathematics subjects so they can have a better performance in more advanced subjects; however, it is not clear whether the existence of this course or the path students follow, is really helping in later and more complex courses. This work shows the analysis of students' performance in the leveling "Mathematics Workshop" course and its impact in two later courses "Complements of Mathematics" and "Introduction to Calculus". The goal of this paper is to determine if it is appropriate that a student must take or not "Mathematics Workshop" and evaluate if there exists a relationship between the academic performance in this course and the next ones.

Keywords: Impact of previous courses, leveling courses, mathematics courses, students' performance, undergraduate programs.

ASSESSMENT OF PHYSICS PRACTICAL WORK USING INNOVATIVE COMPUTER-BASED TECHNOLOGY SYSTEM

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Abstract

The daunting nature of the laboratory environment poses enormous challenges to students when performing practical work. The assessment of laboratory practical work is characterised by inherent challenges associated with the technical tasks performed as part of the process of executing scientifically acceptable laboratory reports. Meaningful assessment of physics practical work in particular requires the adoption of innovative approaches that make provision for development of scientific literacy and laboratory competence through well-structured laboratory activities. In response to this key imperative, an innovative computer-based technology system has been adopted for assessment of physics practical work at a South African university for several years. By its very nature, the innovative computer-based technology system is primarily a platform consisting of a meticulously developed database encapsulating various experiments. The database provides unique characteristic features for each experiment and facilitates objective assessment of practical work per work station. In addition, the computer-based technology system provides the capacity to assess a considerable number of experiments efficiently within a short duration. The utilisation of the innovative computer-based technology system provided opportunities for meaningful assessment of physics practical work. Furthermore, the system facilitated the identification of the inherent conceptual and technical difficulties associated with the compilation of a plausible laboratory report leading to appropriate implementation of relevant remedial interventions to address pervasive knowledge gaps. Some of the difficulties encountered by the students include plotting of graphs and their interpretation as well as performance of mathematical calculations pertaining to various experiments. The theoretical implications for pedagogic innovation are discussed.

Keywords: Practical work, computer-based technology system, assessment, laboratory environment.

PROFESSIONAL IDENTITY CONSTRUCTION AND SOCIALIZATION AMONG PUBLIC RELATIONS STUDENTS IN UNITED ARAB EMIRATES

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Abstract

In the UAE, economic and cultural forces have resulted in a society with a sharp imbalance of the population (about 85% ex-pats and 15% locals, or Emirati) which has led to under-representation in many fields, including public relations. One contributor to success in a field, is the development of professional identity construction and professional socialization, which can occur while in the post-secondary environment. Utilizing Gardner's (2008) framework for the development of professional socialization, this is a qualitative study of in-depth semi-structured interviews of 10 Emirati public relations students from Canadian University Dubai as a purposive convenience sample. Findings reveal that Emirati students are developing in their professional identities with strong inputs at the institutional/programmatic and faculty relational levels but are not contributing as strongly to their own development through personal/individual efforts outside the classroom. More focused efforts at this level could help Emirati public relations graduates be more prepared graduates, and better positioned for success in the field, leading to better overall representation in the field within the society. Further research into motivations would be helpful. Also, exploration into the development of mentorship programs/processes are suggested.

Keywords: Public relations, students, professional identity, socialization, UAE, education.

ACADEMIC PERFORMANCE AS AN INDICATOR OF STUDENTS' PREPAREDNESS FOR UNIVERSITY STUDY: A CASE OF PHYSICS

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Abstract

The articulation gap between school and higher education within the South African context remains a contentious issue reflected upon as an integral part of scholarly debates. The standardization of assessment outcomes is not viewed in a positive light as it is perceived to encourage grade inflation. Grade inflation is largely regarded as a negative factor eroding the quality of assessment outcomes for students intending to enroll for university studies. In response to this key imperative, the academic performance of first year physics students at a South African university was tracked as a function of their input characteristics. While the students achieved satisfactory results in mathematics and physical science in the National Senior Certificate Examination, this achievement could not translate into commensurate satisfactory academic performance in the Mathematics, Science, Engineering and Technology programs offered by institutions of higher learning. In particular, analysis of the academic performance in physics revealed that students struggled with physics course content. This unpalatable reality signifies that students come to the study of physics at university with varying levels of content knowledge gaps subsumed within standardized assessment outcomes. This scenario can partly be attributed to the impact of grade inflation occurring as part of standardization of assessment outcomes by the Quality Assurance Council. Implications for provision of higher education are discussed.

Keywords: Articulation gap, standardization, assessment outcomes, grade inflation.

PROJECTS AND TRENDS

WORKING EMOTIONS WITH ASD STUDENTS: DEVELOPING EMOTIONAL SKILLS WITH EDUCATIONAL SOFTWARE

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Abstract

ICT tools are changing our society. The vast majority of our daily activities are subject to its influence. This element of change can be used to respond to existing diversity. As a result, in our study educational software is used to help ASD students to develop emotional skills. We have worked with six students with ASD between seven and ten years old. Three of them formed the control group and the rest of the sample was experimental group. Moreover, all the users had language delay. It has been studied with a Pretest situation to know the starting point of our study. The length of the session in Experimental and Control Group was 30 minutes during 3 months. It has been done two sessions per week. At the beginning of the session the objectives were stablished. Furthermore, two groups made the same activities but one of them used educational software and the other traditional methodologies. The educational software fixed five difficult levels. In addition to this, they are focused on diversity of ASD lack of skills. Finally, a Posttest situation is produced to know the improvement of the sample and the period of study. In the future we would like to complete this software with more complex and real situation.

Keywords: Emotion, ASD students, educational software, technology, emotional skills.

INFANT SCHOOL DEGREE STUDENTS' PERCEPTION OF THE FLIPPED CLASSROOM MODEL

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Abstract

This study presents a quasiexperimental design of the flipped classroom model in the subject of School Organization: time, space, means and resources as part of the Degree in Infant School Education at the University of Jaén. A total of 152 students participated in the study; of this total, 119 students implemented the flipped classroom method (EG) and 33 students continued with traditional classes (CG). The main objectives were to find out what students' perceptions were regarding the application of this model and confirm if any differences exist in the learning results obtained by both groups. Results show keys relevant to theoretic argument, as well as to the experience itself both before and after it was carried out. The conclusions of the study based on the two instruments designed reveal progress in the use of collaborative learning in both groups, with the flipped classroom group presenting a higher valoration. With reference to the implementation of the model, an increase in the teachers' workload and the effort undertaken by the students stands out, underlining the students' competence in the average marks obtained.

Keywords: Flipped classroom, ICT, teaching practice, teacher education.

DIGITAL ART THERAPY EDUCATIONAL APPLICATIONS FOR AUTISM SPECTRUM DISORDER (ASD) POPULATION

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Abstract

Autism Spectrum Disorder (ASD) is characterized by restrictive and repetitive behavior as well as social and communication difficulties, according to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). The use of art as an educational intervention tool in children with ASD may contribute to a more flexible and relaxed attitude, producing improvements in sensory and emotional regulation, a better self-conception as well as helping substantially the communicative, social and learning capacities of the individuals of this population, enhancing both their attention skills and their ability to process new information. In this paper we review the literature devoted to visual art therapy as a special instrument for children with ASD, both in the traditional and the digital settings, in the period 2000-2017.

Keywords: Autism, ASD, art therapy, digital, educational.

USING CAI FOR IMPROVING ACADEMIC SKILLS OF STUDENTS WITH SPECIAL NEEDS

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Abstract

Students in special education classes have been found to make the greatest growth in reading skills during the early primary grades, making this a critical period for early literacy intervention. Research has also stressed the importance of early intervention for students with mathematics difficulties. Using computer-assisted instruction (CAI) technology has shown promise; however, most of the literature concerning students with disabilities involves case studies. The current study explored the impact of CAI instruction on literacy and math skills for students with active special education status. CAI technology was used by elementary school students with active special education status in two school districts. Performance at the end of the school year for students with active special education status who used CAI was compared to students who either had low usage of, or who did not use, CAI. In all cases, students with active special education status learning with CAI curriculum showed consistent improvement, demonstrating higher end of year scores and gain scores on measures of math and reading skills. Across all strands, students with active special education status, as well as control students who do not have active special education status. These results add to the findings of prior research which indicated that CAI curriculum could have a particular benefit to sensitive populations.

Keywords: Early childhood, literacy, math, technology, special education.

OPEN AIR EDUCATIONAL SPACES AND LEARNING ENVIRONMENTS

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Abstract

Educational spaces are a fundamental aspect of school activities and help define the multidimensional nature of educational contexts; they make an active contribution to training, and certainly should not be understood and represented as mere containers, as neutral terrain in which the relationship between teachers and learners simply takes place. The features and configuration of educational spaces become more significant in the field of outdoor educational curricula and land cultivation practices, since the change of the setting affects all aspects of the educational relationship.

The aim of this paper is to draw attention to the unique advantages of open air spaces for horticulture in terms of learning environments; it will also show how students can use the interaction between numerous elements to build their own paths of knowledge. In particular, the following aspects will be examined: the social dimension of learning; collaboration; openness to difference as a resource; the use and development of authentic learning contexts; and the importance of promoting a wide ranging, multifaceted vision of knowledge in the field of ecology.

Keywords: Open air teaching, learning environments, horticultural education, sustainable development.

SOCIAL COPING STRATEGIES AMONG GIFTED BOYS AND GIRLS

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Abstract

The article is focused on the social relationships of gifted children and specifically the social coping strategies they use in order to enhance their position in their school classroom. The study is focussed on diagnosed gifted pupils on the level of education ISCED2 who are mostly placed in special schools or classes for the gifted. The research is based on a five-factor version of the Social Coping Questionnaire by Swiatek (2002) applied in the Czech educational environment. The five factors include: Denying Giftedness, Social Interaction, Humour, Conformity and Peer Acceptance. Due to the repeatedly detected unstable factor structure in the questionnaire, we don't base our results strictly on established factors in the scope of the analysis, and we focus on the items individually. The goal was to find out whether there are differences in the usage of social coping strategies by boys and by girls. 235 diagnosed gifted pupils in total were involved in the research. We found substantively significant results in the usage of social coping strategies among girls and boys. The gifted boys' strategy is humour and they declare to be better accepted by their peers than the gifted girls. The gifted girls, on the other hand, deny their giftedness; they try to conform and use their talent in the form of helping their classmates with homework and catch-up learning.

Keywords: Gifted pupils, school class, social coping strategies, gender, Social Coping Questionnaire.

ENVIRONMENTAL EDUCATION IN ECUADOR: CHALLENGES AND TRANSFORMATIONS

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Abstract

The main objective of this chapter is to reflect about the challenges and transformations that Ecuador faces on Environmental Education. In 2008, the new Constitution recognized the Rights of Nature, in order to restore the ecological footprint. Good Living is a philosophical and political worldview of kiwicha indigenous peoples of Andean Region, where human beings are interconnected with our planet Earth and the whole cosmos. For this reason, the work uses the transdisciplinary methodology to integrate scientific knowledge with ancestral wisdom, in order to combine an ecology of knowledge. As result, the research aims to develop a critical environmental awareness to advance in the National Environmental Education Plan. Some eco-pedagogical projects have been formulated at the National University of Education of Ecuador to contribute in the achievement of the Sustainable Development Goals lead by the United Nations for the year 2030. As main conclusion, Environmental Education in Ecuador seeks to bio-literate citizens to face the complex civilizing challenges of the Anthropocene, by teaching how to feel-think-act in harmony with the co-evolutionary processes of nature.

Keywords: Environmental education, good living, eco-pedagogy, bio-literacy, transdisciplinary.

A PROBLEM-BASED LEARNING APPROACH TO DIVERSITY

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Abstract

The key motivation for the paper was to immerse students in the theme of "Diversity" as an aspect of human resources, within small international groups. Diversity is a positive approach to diversity management and the systematic, fair and objective management of workforce diversity. Diversity can be triangulated into discrimination, difference and dominance.

The objective was to achieve a better understanding of disabilities, by working on a real life case study. Students in this study, attended a conference with other students from various European countries, working together, to find a solution to the case study during the three day time frame.

Students needed to be open minded, willing to listen to the opinion of others, to build upon their understanding of culture and behaviours and immerse themselves in a different way of life. Students working in small groups, tackled the problem and tried to solve it. The method was problem-based learning using the seven step approach of clearing difficult or unclear words and terms, defining the problem, analyzing the problem, systematic reorganisation (constructing a mind map), defining aims of learning, searching information and reporting.

After receiving the case study, the students looked initially at the facts, they then defined disability, establishing whether the case was either an inequality or an injustice. It then looked at three key areas recruitment procedures, company looks policy and communication. These three key areas were fully investigated in pedagogical terms and whether the company selection process was appropriate and standardised, if the training process was appropriate and if the human resource department gave the staff member bad advice i.e. contrary to company policy. The students set about investigating if the looks policy discriminated in law. The communication process looked to see if the manager behaved appropriately, if the company had a communication problem or if it was simply due to inadequate line manager training.

Through a rigorous enquiry into European legislation and the exploration of selection procedures in different countries through similarities and differences. In order to determine if the case was a result of the disability, discrimination or harassment. Following the investigation, students then determined that the case was actually a case of unlawful harassment and discrimination. The students highlighted the key findings and outcomes of their case study through a group poster presentation. Each student having an opportunity to articulate their findings to the wider audience.

Keywords: Diversity, disability, discrimination, harassment.

DISABILITY IN THE SYLLABUS: EXPLORING TEACHERS' WILLINGNESS, EDUCATIONAL STRATEGIES AND TEACHING MEDIATORS

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Abstract

Tackling at school a sensitive subject like disability requires both teachers' willingness and awareness about the importance of dealing with this subject in the classroom and the educational and didactic concerns. The Italian school, characterized by a long tradition of welcoming children with disabilities, needs the structuring, into the curriculum, of specific proactive interventions, which, using didactic mediators, provide children with a deeper understanding of disability. The design of such educational interventions requires a great commitment to teachers because it recalls several factors (categories) including those related to the identification of appropriate teaching strategies, the choice of possible mediators but above all to questioning the availability, intentionality, opportunity of teachers to propose children a theme considered 'sensitive'.

With the aim of knowing what are the considerations of the teachers on this topic, it was designed a sequential exploratory research, composed by a qualitative and quantitative phases.

Keywords: Disability, inclusion, school, exploratory design, sensitive subject.

LONG-TERM EFFECTS OF CAI FOR PRE-KINDERGARTEN, LOW SOCIOECONOMIC STATUS STUDENTS

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Abstract

The study aims to investigate the long-term effects of technology on early literacy skills. Incorporation of technology into the classroom has been commonly explored, however there has been little evidence that these effects are long-lasting. Early childhood education can prepare young students for successful school experiences despite challenges arising from personal circumstances in the home: Therefore, stronger, more valid studies investigating high-quality early childhood education for minority students and children from lower economic backgrounds are necessary to safeguard academic success for all students. In the current study, a computer-assisted instruction (CAI) program was provided five days per week for fifteen minutes per day to pre-kindergarten students from low socioeconomic status homes in Florida during the 2014-2015 school year. None of the students used CAI while in kindergarten. At the end of the 2015-2016 school year (end of kindergarten), these students were given a literacy assessment, and their scores were compared to the scores of a control group of kindergarten students who did not have access to CAI. The sample was analyzed by demographic factors, including English language learner (ELL) status, ethnicity, and socioeconomic status (SES). Students who used the CAI program in pre-kindergarten had higher literacy scores a year later (at the end of their kindergarten year) than control group students. The results of this study demonstrate that after using CAI at a young age, minority students and those from lower SES families were positively impacted in their academic performance, improving their learning beyond the immediate use of the software. The large effect sizes indicate that students, particularly ELL and Hispanic students, saw substantial, long-term meaningful improvement as a result of using CAI. These results indicate that CAI technology can have a lasting positive effect on early literacy skills.

Keywords: Computer-assisted instruction (CAI), literacy, early childhood.

STRATEGIES AND RESOURCES FOR ALL? ATTENTION TO DIVERSITY IN THE COMPULSORY TEACHING OF SOUTHERN SPAIN

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Abstract

Strategies and resources to attend the diversity of students propose learning environments as a response to processes of school exclusion-segregation. In this sense, various studies indicate the significance of these strategies and resources to address the diversity of students in the construction of a school for all.

The study participants are special education teachers in public centers of Early Childhood Education and Primary Education in the south of Spain. The objective of this study is to know and analyze the strategies and didactic resources they use. For this, a qualitative study was proposed using instruments such as interviews, classroom observations and daily research.

The results show the conceptions and practices in the classroom, in relation to the strategies and resources implemented to attend the diversity from the curriculum. This study presents the range of possibilities regarding their uses and functionality in the classroom, as well as the degree of inclusion that they enhance.

The conclusions emphasize that the response from the curriculum should be made from the logic of diversity, not from the logic of difference. But the reality of everyday practices indicates a divergent direction to these perceptions, since the daily practice in the classroom is overburdened by teacher bureaucratization, the pressure of external evaluation tests, international rankings and the reproduction of conventional measures that do not encourage a comprehensive curriculum able of being acquired by all school children.

Keywords: Attention to diversity, teaching strategies, resource.

"DEAF LEARNING": USING A VISUAL METHOD TO TEACH WRITTEN LANGUAGE TO THE DEAF

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Abstract

The majority of deaf people prefer to use the visual channel for communication, choosing a national sign language instead of a spoken language. In many countries, Deaf education is still not bilingual, therefore deaf people frequently have problems with learning and using the written language of their country. The Erasmus+ project "Deaf Learning" addresses the need for a visually-oriented written language course for the levels from A1 to B2. The main target group is that of young deaf adults aged 16 to 25 years. A secondary target group are older deaf people who are interested in improving their written language competence.

Keywords: Deaf education, written language teaching, sign language, interactive course.

CONCEPTIONS ABOUT FACEBOOK USES IN HIGHER EDUCATION

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Abstract

Information and communication technologies appear as integrated resources at different levels in university education. This situation causes an inquiring investigation about the different uses and applications that are applied to the main involved agents: professor and student.

This work is part of a descriptive and exploratory study that systematizes the conceptions that the student and the teaching staff have in relation to the use of the social network Facebook; in particular, we focus on the practice of the subjects that promote the application of this tool as a resource that goes beyond maintaining direct contact between teacher and student.

Through a mixed methodological design, on the one hand we use a quantitative instrument for the students' opinion and, on the other hand, we propose a semi-structured interview with the professors using this social network in their classes, with the objective of triangulating the information and analyzing the pedagogical relevance of Facebook in higher education.

The results are available for shared conclusions in other studies that allow communication between teachers and students, teamwork and peer tutoring, or contribution as a teaching resource from which generates significant knowledge of the subjects and achieve a social learning.

Keywords: Facebook, higher education, socials networks, ICT.

SOCIOCULTURAL PROBLEMS OF IMMIGRANTS IN EUROPE

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Abstract

Europe is a continent that it receives a crowd of people from others continents every years, they are calling immigrants. These immigrant people, when they arrive to Europe, they have a lot of sociocultural problems that they make their adaptation difficult. Some of the European countries that most immigrant people receive, throughout the year are Spain, Italy or France, because they are very close to the African coast. They have a lot of different problems in Europe. In this article, we go to speak about the sociocultural problems, dividing them, to their better understanding, in social problems and cultural or

educational problems. The immigrant people have a lot of social problems among which are, for example, illegal or irregular immigration, the prostitution or the marginally or social exclusion risk. Between educational problems we can find some adaptation difficulties, as the language or the different custom that this type of student has with respect to the European educational systems.

Keywords: Immigration, sociocultural problems, Europe, marginally, language.

VALUES EDUCATION APPROACHES WITH DILEMMAS IN SCHOOLS

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Abstract

Values education is an important topic in the context of schools, because for students, teachers are at the third position for educating them in values after parents and grand-parents. Values education is the active examination of the individual with its environment and its various, partially conflicting values. In order to foster values education in schools in Germany, four approaches using dilemmas are compared in order to identify key commonalities which are central for values education. These approaches are (1) the Konstanz's method of dilemma stories, (2) the Values Discourses, (3) the Values and Knowledge Education Approach, (4) and Dilemma Stories in primary schools. Categories of the qualitative analyses were objectives, target group, didactical design, subject area, and time affordances. Results show commonalities in using dilemmas, the objectives, the didactical procedure, and time affordances. Differences between the approaches comprise the target group, and the subject area. Problems in using these approaches are specifically time restrictions which are necessary to sustainably implement values education and foster the transfer to values-based actions.

Keywords: Values education, dilemmas, schools.

DEVELOPMENT OF APPLICATION FOR MATERNAL LANGUAGE IMPROVEMENT FOR FUNCTIONAL ILLITERATES BASED ON THE THINKING DESIGN APPROACH

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Abstract

In this paper we highlight aspects of the research about the elaboration of an application prototype aimed at functional illiterates, based on the methodology of Design Thinking. It includes: definition of a problem, presentation of a solution, prototyping, testing, and conceptualization about this process. At the present moment of the research, we are in the prototyping phase, modeling the concepts of interactive activities and interfaces of the application. The expectation is that the subjects, who constitute the target audience, even presenting different digital fluencies, with greater or lesser ability, they can perform gamified activities in mobile interfaces, use the proposed application, both to broaden their conditions of interpretation and written understanding of verbal codes. This research has a social purpose of inclusion through the application, as social good. It addresses educational design issues in order to improve the verbal signs domain of people with low schooling. Recent research indicates that the reading deficits of the Brazilian population increasingly reinforce social, cultural, work, productivity and direct inequalities in the possibilities of new learning, which may impact different fields (Conceição, 2016). When analyzed in a school setting, these shortcomings increase difficulties in learning content from critical subjects and also present challenges on how to prepare citizens to seek employability and their productive sustainability in global knowledge societies (Mauch et al, 2016). Functional illiteracy has gained more evidence in study circles, which aim to raise awareness of active methodologies mediated by digital

technologies, which define more social distances between individuals with low literacy. However, when applicable solutions are offered they can increase the possibilities of inclusion, new practices of communication, reasoning, production and use of different competences. According to Indicator of Functional Illiteracy in Brazil there are approximately 14 million absolute illiterates and a little more than 35 million functional illiterates. In this way, there are strong implications in the daily life of these individuals, which prevent them from performing ordinary actions, such as picking up a bus, paying a bill, recognizing addresses for their mobility, making simple calculations on purchases, controlling the frequency and dose of medications etc. To transform illiterate individuals into proficient literates, it is necessary to develop some capacities in the design of this application: interpretation of different texts, making inferences, elaborating syntheses, associating rules with particular cases, recognizing and working arguments, understanding the main idea of the story and different visions on the same text, among others.

Keywords: Functional illiteracy, cognition, learning, mobile learning, active methodologies.

TEACHING AND LEARNING

FACTOR STRUCTURE OF THE SOCIAL COPING QUESTIONNAIRE IN CZECH EDUCATIONAL ENVIRONMENT

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Abstract

Questionnaires are the worlds most widely used methods of quantitative research in the social sciences. They often focus on tracking abstract and intricately operationalised constructs. This is why greater emphasis is placed on their quality and efficiency. We repeatedly test their psychometric properties and, above all, focus on their validity and reliability. To do so, we use statistical procedures such as exploration factor analysis and reliability coefficients. This study focuses on exploring of factor structure of The Social Coping Questionnaire by Swiatek (2007) in the Czech educational context, specifically in the field of educating gifted pupils. This tool exists in several versions and has been tested on various samples of gifted pupils around the world. However, the results of factor analysis are not uniform. We decided to test this tool on a sample of 235 gifted pupils in the Czech Republic. We focused on the ISCED2 level of education. Our factor analysis results are not entirely consistent with the declared structure of the aplied version of the tool. The results can be influenced by translation of the questionnaire into the Czech language and its application to a specific population of gifted pupils in the region. We focus analytically on different versions of the questionnaire factor structure. At the end of the study, the results are discussed and general recommendations are made for further work with the tool in the Czech context.

Keywords: Giftedness, social coping, questionnaire, construct validity, factor analysis.

LONG-TERM EFFECTS OF COMPUTER-ASSISTED INSTRUCTION

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Abstract

Research into the long-term effects of computer-assisted instruction (CAI) has demonstrated that, while learning outcomes are positively impacted in the short-term, gains can diminish with time. As CAI is increasingly playing a role in the classroom, it is necessary for research to demonstrate that this technology is placing young students on a positive academic trajectory. The current longitudinal study explored the lasting effect of a CAI program on young learners' literacy skills. South Carolina elementary school students (N = 1,704) receiving a CAI program were followed through kindergarten and first grade during the 2015-2016 and the 2016-2017 school years. Students were assessed at the middle and end of the first grade school year using the Developmental Reading Assessment (DRA). Scores of students who received traditional, teacher-directed classroom instruction and not the CAI program were compared to scores of students who used the CAI program for one year (only during kindergarten) or for two years (in kindergarten and first grade). A year after students stopped using the program, students who used the CAI program for one year (only during kindergarten) scored significantly higher than students who did not use the CAI program, indicating a salient and persistent effect of CAI. Additionally, evidence of a dosage effect was found while examining the scores of students who used the CAI program for two years: While all students who used the CAI program significantly outperformed the control, the largest effects were found for students with high CAI usage. This finding extends prior research which had found that increased use of CAI could lead to better results within a single school year. Given the evidence found for both a compounding effect and a persistent benefit, this study supports the sustained use and early implementation of CAI.

Keywords: Computer-assisted instruction (CAI), literacy, early childhood.

CHILDREN LEARN COMPUTATIONAL THINKING IN THE CLASSROOM

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Abstract

In the context of Education and Training for the 21st century, where the Digital Fact (continuum of technological advances) plays a leading role, the redefinition of the teaching and learning process becomes mandatory. This transformation must focus on improving the skills that allow human and social development. These advances are accompanied by new challenges, and the society needs to be prepared for them.

Collaboration, communication, creativity, critical thinking and the problem solving ability shape a set of competencies that are considered essential in the 21st century. These competencies can be approached from a macro-competency called Computational Thinking, which is linked to the Digital Fact. Therefore, it arises the need to know what will be the effects produced by Computational Thinking on said competencies.

To achieve this purpose, a set of learning materials has been applied, which contributed to the development of this macro-competency in children. Subsequently, its impact on the rest of the competencies has been analyzed through the application of a set of trials. This analysis has been carried out based on the grades obtained by the students in the program developed specifically to improve the Computational Thinking from a Primary Education and ICT perspective. This way, a confirmatory research has been started and concluded following the method of the Case Study. The tools that enabled to obtain data were tests and tasks that measured the chosen competencies.

Regarding competencies, using a significance level $\alpha = 0.05$, it has been shown that for the case studied, the qualifications obtained in the Computational Thinking development program did have a significant relationship with the collaborative (p-value = 0.009), critical thinking (p-value = 0.018) and problem solving competencies (p-value = 0.008 and p-value = 0,031).

It was concluded, in consequence, that Computational Thinking is a macro-competency that allow to develop the necessary skills for the 21st century in a global way.

Keywords: Competencies, skills, computational thinking, digital fact, education.

WRITING AT THE HIGHER EDUCATION LEVEL: DIFFICULTIES PRESENTED BY FIRST SEMESTER STUDENT TEACHERS

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Abstract

In spite of undergraduates having passed exams to enter higher education, this does not necessarily imply that they can read and write proficiently. In light of this situation, it is important to reflect on the initial education of teachers. This article presents some results of a broader research project investigating the socioeconomic-cultural profile of first-semester student teachers' reading and writing skills via questionnaire at a state university in São Paulo State, Brazil. This article aims to describe the reasons they give for their writing difficulties or insecurities. The research participants are 79 first-semester undergraduates in Pedagogy — 36 and 43 students from the afternoon and evening shifts of the program, respectively. Participation was made available to those interested in collaborating with the research — all of the students enlisted to participate. This research is of a qualitative nature with a descriptive-analytical

approach. When asked about the reasons for their writing difficulties or insecurities, the participants indicated low self-confidence and increased anxiety, lack of knowledge about the topic/subject, deficient knowledge of standard language, no writing training/habit/practice, difficulty in organizing ideas, and poor reading habits.

Keywords: Writing in higher education, initial teacher education, writing difficulties.

TEACHERS' VIEWS AND PEDAGOGICAL PRACTICES WHEN TEACHING THE TOPIC EVOLUTION TO GRADE 12 LEARNERS

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Abstract

The world over, evolution has proved to be a contentious topic to teach to high school learners despite its value in acting as 'a blending concept' in Biology and 'the disease tracking foundation' in pharmacology and medicine. In the South African Life Sciences curriculum, evolution was introduced in 2008 hence teachers are obligated to address the topic adequately as there are accountability issues at the end of the year. Unfortunately previous research showed that South African teachers question the theory of evolution and are conflicted to teach it. Accordingly, 15 teachers were interviewed each once to explore their views on the teaching of the topic evolution to Grade 12 high school learners and the pedagogical practices they employ when teaching the topic. Qualitative analysis of the teachers' responses showed teachers' mixed views about the content of the topic of evolution, the value of that knowledge to learners and society in general and how best it can be taught. The study also showed that sometimes teachers failed to reconcile their beliefs and those of the learners and their science classroom practices. There is need for teacher professional development programmes to continuously develop teachers in terms of content and pedagogical skills as teachers can be challenged by their own personal belief systems, which conflict with their understanding of the theory of evolution.

Keywords: Teachers' views, pedagogical practices, Grade 12 learners.

DEVELOPING A RUBRIC FOR ANALYSING THE INCLUSION OF "SCIENTIFIC PRACTICES" IN PHYSICAL SCIENCES TEXTBOOKS

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Abstract

In the view of reframing classroom inquiry and achieving the common goal of the latest K-12 Framework in Science Education and Next Generation Science Standard (NGSS) of United States that all science learning process should engage learners in practices to construct and use scientific concepts and ideas. They highlighted the significance of science practices in helping learners to improve the ability of interpreting phenomena, solving problems and making informed decisions about person and society (National Research Council [NRC], 2012; NGSS Lead States, 2013). Hence, this paper describes the development and validation process of a rubric designed to analyse the inclusion of "science practices" in science textbook. The first phase describes in detail the process used in developing the rubric for analysing textbooks for inclusion of "science practices". The developed rubric included eight practices, 4 levels of each practice, and descriptions and examples for the levels. The secondary phase reports on the use of the rubric in a preliminary analysis of a Grade 10 physical science textbook. Qualitative content analysis was used for this study. The result indicates that the rubric developed is a valid instrument that can be used in analysing textbook for inclusion of "science practices".

Keywords: Inquiry-based learning, NGSS scientific practices, textbook analysis.

ORGANIZATIONAL ISSUES

ATTRACTING TALENT: INTERNATIONAL STUDENTS' TRAINEESHIP PROGRAM. A PROPOSAL

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Abstract

European Commission's long term initiatives to promote international education of students and teaching and administrative staff such as Lifelong Learning Program (2007-2013) or the current program Erasmus + (2014-2020), have allowed participants (specially third-level students) to give an added value to their educational background, not only for study purposes but also in relation to the opportunity to have a traineeship in a foreign country. In fact, the Erasmus + Key Action 103 (KA103), applied since 2014, covers study and traineeship periods abroad as a result of the relevance that traineeships in Europe acquired during the 2007-2013 program period, which managed traineeships abroad as a distinct and minority program. The case of the University of Almería (Spain) results of particular interest: its strategic plan for internationalization includes as one of the main objectives to increase the number of local students to have a traineeship in a European country, a program which has been developed for fifteen years now. However, the increasing demand of local companies and even several University departments and services to host international trainees has triggered a redesign of its internationalization policy and focus on approaches also aligned to internationalization at home. This paper will explore and assess the proposal of a specific traineeship program for international students in order to attract foreign talent to local companies and also to several departments and services of the University of Almería. It will provide the different strategies to implement this program, its management and the possible outcomes for the key actors.

Keywords: Erasmus +, *lifelong learning program, internationalization, traineeships, internationalization at home.*

EVOLUTION OF DIGITAL BADGES: FROM "MOTIVATIONAL CREDENTIAL" TO HUMAN RESOURCES TOOL

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Abstract

Badges have grown to become the most important micro credential in the education industry. When they were introduced, they were not yet seen as a tool to address the problem of the skills gap.

Most people dealing with Education have heard about digital credentials, certifications, and badges. But today's usage of Badges is only the start: evolution around micro credentials will influence missions and actions of educational institutions and other industries.

We're starting with a summary of what problems were addressed by the introduction of badges, and will explore further their influence for issuers, recipients, and the industry as a whole. Next, we will look at other evolution in the education industry and how badges will have a part in that.

Finally, we're bringing the existing and future processes and approaches around badges together and we'll create an easy-to-manage framework. The purpose is to present a structured approach, which helps educational institutions, employees, employers in general and also Human Resources to close the current skill gaps as fast as possible.

Keywords: Credentials, badges, human resources.

COMMUNITY SCHOOLS: BRIDGING SCHOOLS, FAMILIES, AND THE COMMUNITY TO ENHANCE STUDENT ACADEMIC SUCCESS

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Abstract

Community schools, which are also referred to as "full-service" or "extended service" schools, provide students residing in poverty stricken areas additional services that extend beyond the traditional educational setting. Providing students support beyond educational services has become more significant due to the importance placed on bridging interconnected support systems to enhance student performance. Indeed, Varlas (2008) contented that "research has shown a strong correlation between areas with high levels of poverty, crime, and mobility and low student achievement" (para 7). Community schools are becoming more commonplace particularly in countries such as the United States in which more emphasis is being placed on providing a wider range of services to its learners. In fact, Min, Anderson, and Chen (2017) proclaimed that community schools are one of the most popular and rapidly growing educational models. Moreover, initiatives to broaden educational services beyond academic standards can be found worldwide in countries such as England, Sweden, Ireland, Sri Lanka, and Afghanistan (Varlas, 2008).

The goal of full service community schools is to enhance learning by extending the types of services that are available to students and their families (Kronick, 2005). Particularly, community schools are designed to provide coordinated services that include supports and programs such as medical care, food aid, and the inclusion of enrichment activities. Specifically, community schools are structured to increase student achievement gaps through providing a range of services that include vital student support via social services, parental outreach, and healthcare providers (Horn, Freeland, & Butler, 2015). The collaborative partnerships that are created among the school, parents, and community has been found to be a more effective approach to student learning and development (Epstein, 2011).

Research focused on community schools have resulted in positive outcomes demonstrating that they provide integrated student supports, expanded learning opportunities, enhanced community and family engagement, and that they provide collaborative leadership and practices (Serrette, 2016). In community school contexts, students are afforded the opportunity to receive mentoring experiences, learning opportunities focused on conflict resolution and student advocacy, and engaging interactions focused on college and career possibilities. Further, through a community school model, educators, parents, community leaders, and community social and healthcare providers are able to learn how to collaborate effectively to ensure that a full range of benefits are provided to students to yield higher learning outcomes (Lawson & van Veen, 2015). Research focused on community schools and their impact worldwide will be presented.

Keywords: Community schools, community engagement, poverty, school readiness, academic enrichment.



Workshops

LIVE2WORK PROJECT: METHODOLOGY FOR A LIFE PROJECTS INTERVENTION DEVELOPED FOR PEOPLE IN PROFESSIONAL VULNERABILITY

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Abstract

This workshop aims to present a socially relevant and scientifically sound methodology for a life projects intervention with young adults and adults (18-30 years) in situations of professional vulnerability, including migrants and refugees – the Live2Work Project. Among other resources (e.g., the theoretical handbook, the course guide, the in-service training courses, the online audio-visual learning scenarios, the Moodle courses and the on-line learning platform), the project provides a toolbox composed of innovative and easy-to-use pedagogical resources. Its major goals are to contribute to the development of healthy and satisfying life/career trajectories by expanding the access of individuals to educational, training and professional paths, in their new countries. The toolbox was developed considering a three-dimensional scheme that includes the personal, contextual and temporal dimensions, as well as a change dimension based on transition skills training. Some activities that integrate the toolbox, in particular those related to the clarification of self-concept and development of self-esteem, will be tested through "My Values: Image Cards" and "My Strengths: Solitaire". This workshop is aimed at end users who work directly with this target audience, namely trainers, mentors and advisors (max. 12).

Keywords: Live2Work Project, life projects, professional vulnerability, young adults, migrants and refugees.

ROLE PLAYING GAME: A TOOL TO APPROACH SOCIAL RELATIONSHIP IN THE CLASSROOM

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Abstract

Games are an optimal way for children to express themselves and develop new conceptual understandings. In the 21st century, students have different kinds of learning needs; both cognitively and emotionally. This workshop aims to offer Role Playing Games (RPG) as a way to cultivate all students in developing a sense of community and empathy which has been shown to improve overall learning.

RPG helps students transform themselves into a character that they chose. In character, children will speak their minds and give ideas without fear of being personally rejected; thus, supporting students in building community through their avatars. By the end of the workshop, participants will understand how the game works, and how to connect RPG with their area. They will be able to start their own RPG baseline story and develop their own games. The examples and data presented were derived from a workshop that transform into daily practice during Spanish class at an elementary school in Cali, Colombia.

The session will begin with an explanation of the purpose and practice of RPG for students, teachers, and counselors. Then participants will play a short RPG. Finally, the procedures of how to create a game will be given, and participants will be able to comment or ask questions about the game, its uses, and applicability.

Keywords: Role-Playing, games, expression, creativity.

KEY ELEMENTS IN THE WRITING PROCESS FOR PUBLICATION

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Abstract

The session aims to provide some useful training to researchers in the process of publishing their work. Traditionally, writing workshops have mainly dealt with organization and structure of a research paper and how each of these sections must be written. Another traditional topic has been intertextuality in the sense of how to make proper use of citations. However, there are other elements in the writing process that are also essential for publication. To this end, the workshop will cover the following two aspects: 1) Resources to make our voice visible (positioning) and 2) Resources to involve the reader (engagement markers). A total of four discourse mechanisms will be shown in order to position ourselves as authors and five engagement makers will be exposed in relation to the second topic of the workshop. Theory and practice will be combined providing examples of papers published in prestigious journals where all these resources can be identified. Since these examples will appear in the slides and discussed along the presentation as part of a whole group activity, no limits on the maximum number of participants is established. All researchers interested in improving their writing skills are welcome, especially junior researchers facing the writing of their PhD.

Keywords: Scientific writing, positioning, engaging, writing for publication.

DEVELOPING AFFECTIVE LEARNING ENVIRONMENTS: IMPROVING EMOTIONAL INTELLIGENCE FOR THE HELPING PROFESSIONAL

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Abstract

Blooms taxonomy includes three learning domains: cognitive, kinetic and affective. With the explosion of information and the need for a highly knowledgeable and skilled workforce, higher education has done an admirable job focusing on the cognitive and kinetic learning domains. In order to provide emotionally intelligent workers, however, education needs to focus more on the affective domain. This is particularly true for students who are attracted to the helping professions such as human services, social work, psychology and medicine. The affective domain focuses on students' values, attitudes, beliefs, and emotional engagement (Cazzel and Rodriguez 2011). In order to be effective helpers, students must be able to demonstrate their emotional intelligence. We need to shift education from what students need to know, and focus more on what they need to become (Valiga, 2014). There are three critical components in providing affective learning experiences: creation of an emotional learning environment, implementation of affective learning activities and development of valid and reliable outcome instruments. This workshop will discuss the implementation of these three components of affective learning in the Human Services Department at Metropolitan State University of Denver. Intended participants (no maximum required) include faculty and administrators from various helping disciplines. At the conclusion of the workshop, participants will be able to describe specific strategies for creating emotional learning environments, construct a plan for affective engagement of their students and discuss evaluation methods.

Keywords: Affective, learning, curriculum, design.

TRANSDISCIPLINARY WRITING: AN EXERCISE IN EXPLAINING VISUAL DESIGN PROGRAMS

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Abstract

This workshop session will focus on writing about three visual design software programs -- Revit, Grasshopper, and Houdini. It was drawn from an activity we had in a transdisciplinary course taught in Spring 2018. It will consist of dividing the room into two groups. One group will be tasked with explaining each program when given only written descriptions. The other group will have to explain each program after being given only visual images. We will then show each program's functionality and task the room with revising their descriptions. The workshop hopes to unpack the benefits of both written descriptions and visual depictions, where they overlap and where they are most helpful. In doing so, it will challenge participants to describe complex technological programs to a lay audience.

Keywords: Transdisciplinarity, communication, writing, visual design.

DEMOCRATIC DIALOGUE IN THE CLASSROOM: HOW TO DEAL WITH HOT TOPICS

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Abstract

The education system in today's society is being confronted with new challenges due to cultural and ethnic diversity. Varying opinions and perspectives about a mixed society can be enriching but are not always considered as advantageous by all concerned. Certain events (e.g. the terror attacks in Europe) have had an enormous impact on society over the past years. The impact of such events has had a direct influence on the worldly perception of students and teaching staff. It is not always straightforward for teachers to react constructively to racial comments or to moderate discussions about sensitive topics. Democratic Dialogue consists of several communication techniques. It is an instrument to deal with hot topics and the struggle with sensitive themes. The workshop will start by explaining the main principles of Intercultural Communication. What is cultural awareness and how can we deal in intercultural situations where misunderstandings can arise from the person's different value systems? The second part of the session will focus on the Socratic Method. After sharing our practical experiences and cases arosen from our own practice in Brussels, we will work on cases given by the participants. Participants will have the possibility to exchange ideas and good practices. Finally, we will provide effective tips and tricks. This workshop will focus on ways to teach the controversy in order to foster democratic civic attitudes, cultural consciousness and critical thinking. The workshop is highly interactive and is aimed at teachers interested in improving their communication skills on sensitive topics (max.20 participants).

Keywords: Dialogue, controversial topics, teacher training education, multicultural and (inter)cultural communication, critical thinking.

TEACHING LEARNERS TO TAKE CONTROL OF THEIR FUTURE: APPLYING THE MULTIDIMENSIONAL CURRICULUM MODEL IN SCHOOLS

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Abstract

This workshop aims to introduce the Multidimensional Curriculum Model (MdCM) (Vidergor 2017, 2018) which helps teachers to better prepare students for our changing world, acquiring much needed skills. The model combines innovative teaching strategies like problem and project based learning, phenomenon based learning, and inventive thinking to teach 21st century skills in a blended learning environment. The Uniqueness of the model is expressed in the development of future thinking literacy

through looking at a subject from three different perspectives: the personal, the global, and time (present, past, and future) perspective, incorporating latest technology. The workshop will expose participants to: (a) The MdCM; (b) its components; (c) the different thinking tools used for promoting future thinking literacy; and (d) the current research on the effectiveness of the model regarding its contribution to the enhancement of thinking skills, knowledge acquisition, motivation, and learning strategies will be presented.

The workshop is intended for all participants engaged in teaching in elementary and secondary schools including principles, grade and subject coordinators, and teachers of all subject areas (Max no. 35).

Keywords: The Multidimensional Curriculum Model (MdCM), future thinking literacy, thinking skills, knowledge acquisition, learning strategies.

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