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Introduction to the IJELLO Special Series of Chais Conference 2013 Best Papers

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Abstract

This fifth issue of *Interdisciplinary Journal of E-Learning and Learning Objects* (IJELLO) special series includes a selection of best papers presented at the 8th Chais Conference for Innovation in Learning Technologies: *Learning in the Technological Era*. The Chais conference 2013 was held at The Open University of Israel, Raanana, Israel, on February 19-20, 2013, and was organized by its Research Center for Innovation in Learning Technologies.

This preface presents the mission and activities of the Research Center for Innovation in Learning Technologies at the Open University of Israel. It describes the objectives and themes of the Chais Conference 2013, explains its synergies with IJELLO and the Informing Science Institute, and introduces the papers included in this special selection.

Keywords: instructional technologies, e-learning, technology integration in education, diffusion of innovation, human-computer interaction

Introduction

Learning, finding or retrieving information, and acquiring knowledge are daily fundamental activities in the technological era. Innovative instructional and learning technologies have a crucial role in helping people of all ages develop digital literacy skills, as well as effectively providing them with the knowl-

edge they need. The Open University of Israel (OUI) is based on distance and blended learning and, thus, is committed to the ongoing examination and improvement of its teaching quality through the integration of innovative learning and instructional technologies. The Research Center for Innovation in Learning Technologies functions as the research arm of the Open University for exploring emerging technologies and developing models and strategies for their integration in teaching and learning. The main objective of the Center is to promote research related to the enhancement of instruction, using innovative learning technologies. The Center consists of a consortium of about fifty faculty members from the various OUI academic departments. The Center conducts a wide range of ongoing academic activities such as symposia, workshops, conferences, and research seminars.

The following are some of the fields of research in which the Research Center for Innovation in Learning Technologies is engaged:

- The theoretical foundations of learning, instructional technology and distance education.
- Integration of innovative information and communication technologies into educational systems.
- Defining and characterizing the variables necessary for developing flexible and adaptive technology-enhanced instructional strategies that accommodate students' individual needs.
- Studying the pedagogical and cognitive contributions of emerging technologies to teaching and learning.

"Learning in the Technological Era" is a series of annual national research conferences on innovation in learning technologies, initiated in 2006 by the Chais Research Center in collaboration with EDEN, The European Distance and E-Learning Network. The Research Center for Innovation in Learning Technologies is committed to continue this important research activity, under the name of Chais conference, which commemorates the contribution of the late Stanley Chais, who funded the establishment of the Chais Center, which was closed in 2010. The Chais conference contributes to the formation of a community of Israeli researchers in the field of instructional technologies and to the positioning of the Open University of Israel as a leading organization in the study and implementation of learning technologies.

The 700 participants attending the two-day Chais conference 2013 represented most of Israel's universities and academic colleges, as well as organizations and corporations. The opening keynote Guest lecturers were Douglas Clark of Vanderbilt University, USA, who talked about "digital games for learning: scaffolding integration of intuitive and formal understanding of science" and Shaaron Ainsworth of Nottingham University, United Kingdom, who discussed "understanding and transforming multi-representational learning". The closing lecturers were Niva Elkin-Koren of Haifa University, Israel ("trial in the technological era"), and Tom Ran of Wizmann Institute ("the biological computer: innovation in the computing world").

The purpose of this IJELLO special series of Chais conference best papers is to increase the international impact of the Chais conference by distributing high quality papers from the national conference to a worldwide audience. The Informing Science Institute (ISI) is a natural partner for this mission since it draws together researchers and practitioners of information technologies, who seek effective ways to inform clients about sharing their knowledge with others (http://www.informingscience.org/). The informing science transdiscipline studies the informing process, defined as providing a specific clientele with information in a form, format, and schedule that maximizes its effectiveness (Cohen, 1999, 2009; Gill & Cohen, 2009). Instructional technologies are a certain type of information technologies that aim at providing students and other learners with information and tools to enhance their learning. Within the ISI journals, the *Interdisciplinary Journal of E-Learning and Learning Objects* publishes high quality articles on the-

ory, practice, innovation, and research that cover all aspects of E-learning and Learning Objects (http://www.ijello.org).

The first selection of papers in this series was published four years ago and included 13 papers, which dealt with various aspects of technology integration in teaching and learning, collaborative learning environments, quality of mobile learning, motivation for technology use, and more (Eshet-Alkalai, Caspi, Eden, Geri, & Yair, 2009). The second selection included nine of the best papers presented at Chais conference 2010, on the topics of integration of technology in education systems, diffusion of innovation in learning environments, mobile culture, school versus home learning, collaborative learning, and social aspects (Eshet-Alkalai, Caspi, Eden, Geri, & Yair, 2010). The third selection, which included nine of Chais conference 2011 best papers, emphasized the role of teachers in integrating innovative instructional technologies (Geri, Yair, Caspi, Eden, & Eshet-Alkalai, 2011). The fourth selection of Chais conference 2012 best papers, included eight papers that represented varied aspects of learning technologies implementation and use, including: innovative technologies for teaching and learning, instruction in technological environments, perceptions of online teaching and learning, cognitive aspects of learning in technological environments, simulations in instruction and learning (Geri et al., 2012).

This year's series includes five selected best papers of the Chais conference 2013 that represent the following aspects of learning technologies implementation and use: effectiveness of open educational resources, evaluation of instruction in technological environments, learning from digital displays and e-books, virtual reality applications for learning, technology in the service of people with special needs. Following last year's success, we conducted for the second time, the Chais conference best student paper award. Sixteen of the papers that were presented at the Chais Conference 2013 were candidates for the Best Student Paper Award. This issue includes the extended versions of three out of the seven finalists of the Chais conference 2013 Best Student Paper Award.

Chais Conference 2013 Best Papers

Ninety-eight papers were submitted to the Chais conference 2013. Following the double-blind peer-review process, 40 papers and 32 posters were accepted for presentation at the conference and were included in the conference's proceedings volume (Eshet-Alkalai et al., 2013). This fifth selection of the IJELLO Special Series of Chais Conference Best Papers includes five of the most outstanding Chais Conference 2013 papers, which were expanded and modified for publication in IJELLO and have undergone a full review process by the IJELLO Editors and reviewers.

The first paper by Anat Cohen, Sharon Kalimi, and Rafi Nachmias ("The use of digital repositories for enhancing teacher pedagogical performance") was a finalist for the best student (Sharon Kalimi) paper award of the Chais conference 2013. Anat Cohen et al. examined the effectiveness of open educational resources (OER) and compared teachers' willingness to contribute their own resources and their usage of local learning material repositories of their school versus various general repositories. Their study was based on data collected from 103 teachers from four schools that differed in their implementation level of local repositories. Their findings indicated that while the teachers used a variety of external open repositories, most of them mainly used their local repository, which enabled them to effectively utilize their school's information resources and share knowledge with their colleagues.

The second paper by Edith Manny-Ikan, Tal Berger Tikochinski, and Zipi Bashan ("Does use of ICT-based teaching encourage innovative interactions in the classroom? Presentation of the CLI-O: Class Learning Interactions – Observation tool") dealt with assessment of teaching and learning in technology-based environments. Manny-Ikan et al. introduced CLI-O, which enables collection of various data regarding the use of information and communication technologies (ICT),

the organization of learning, and teacher-student interactions at class. The purpose of CLI-O is to evaluate whether learning in an ICT-based environment is characterized by a unique pedagogy, such as student-centered pedagogy where the teacher serves as a mediator, and uses a variety of technological tools. By providing a systematic description of classroom processes, CLI-O may help teachers and their instructors, as well as researchers, evaluate the gradual implementation of ICT in teaching and learning.

The third paper by Ely Kozminsky and Revital Asher-Sadon ("Media type influences pre-schooler's literacy development: E-book versus printed book reading") was a finalist for the best student (Revital Asher-Sadon) paper award of the Chais conference 2013. Kozminsky and Asher-Sadon examined the contribution of book format to the development of literacy in kindergarten children. They constructed an e-book, which included a story and related activities, and converted it to a printed format. Their experiment examined 50 kindergarten children that were pair-assigned to e-book reading (experimental) or printed book reading (control) condition. Prior to the intervention, there was no statistically significant difference between the groups on literacy measures. Afterwards, the performance of both groups improved on all of the literacy measures. The printed book group improved significantly more than the e-book group on knowledge about story, understanding of the plot, and vocabulary knowledge. When controlling for the experimenters' behavioral protocol, the print group performed better on literacy measures that benefitted from child-adult interaction. However, the e-book was not far behind, therefore Kozminsky and Asher-Sadon suggest it as a viable alternative when a teacher is not readily available.

The next paper, by Miri Shonfeld and Miki Kritz ("Virtual representations in 3D learning environments") investigated the extent to which virtual worlds may serve as online collaborative learning environments for students, by increasing social presence and engagement. Shonfeld and Kritz observed students of education departments from different countries and cultures who created avatars that represented them at collaborative meetings and activities. Their analysis involved observations, questionnaires, and interviews. Their findings suggest that although virtual 3D environments provide freedom, external contexts impose powerful boundaries and expectations, leading participants to seek a socially acceptable online appearance influenced by their cultural norms and by online group identity. Their study extends the dual-congruity perspectives of the Avatar Choice Model to a conceptual framework based on a quad-congruity perspective, by supporting inclusion of the construct importance of the online group that was suggested in prior research, and by adding the constraining effect of offline culture and norms on virtual representations.

The last paper by Betty Shrieber and Yael Cohen ("Using photos and visual-processing assistive technologies to develop self-expression and interpersonal communication of adolescents with Asperger Syndrome (AS)") was a finalist for the best student (Yael Cohen) paper award of the Chais conference 2013. Shrieber and Cohen have built on the general trait of AS students as visual learners and examined how visual assistive technology, such as photographs, video clips, and visual processing software (e.g.,Picasa), influenced interpersonal communication of adolescents with AS, aged 16 to 18 years, that attended special education school. Their findings demonstrated that use of photographs and assistive technology tools may create an incentive for dialogue and help AS students spontaneously share their memories and emotions, while also clarifying their communicative difficulties and providing an opportunity to discuss and treat them. Shrieber and Cohen indicate that though it was not possible to reliably separate the photography sessions from the overall school experience, the discourse around the photos and clip raised awareness and helped each participant identify their strengths.

The above papers represent some of the main themes presented at the Chais conference 2013. Other themes that were discussed at the conference but were not covered in this special selection

included: digital games for learning; network ethics and safe internet; leading the online learning process; learning and teaching in social networks; and technology and scientific literacy.

Conclusion and Acknowledgements

This fifth issue of IJELLO's special selection of Chais conference best papers includes some of the current major issues and trends in learning technologies study. We hope these papers will be of interest to the readers and will encourage future innovative and synergetic instructional technologies research. We look forward to the IJELLO next issue of the best papers of the ninth Chais conference for innovation in learning technologies. Chais conference 2014 will be held on February 11-12, 2014, at the Open University of Israel campus in Raanana, Israel.

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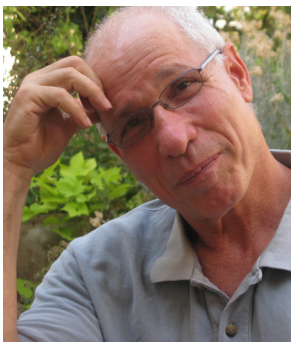

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