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BEYOND THE WALLS OF THE CLASSROOM: INTRODUCTION TO THE IJELL SPECIAL SERIES OF CHAIS CONFERENCE 2017 BEST PAPERS

Nitza Geri * The Open University of Israel, <u>nitzage@openu.ac.il</u>

Raanana, Israel

Ina Blau The Open University of Israel, <u>inabl@openu.ac.il</u>

Raanana, Israel

Avner Caspi The Open University of Israel, avnerca@openu.ac.il

Raanana, Israel

Yoram M. Kalman The Open University of Israel, <u>yoramka@openu.ac.il</u>

Raanana, Israel

Vered Silber-Varod The Open University of Israel, vereds@openu.ac.il

Raanana, Israel

Yoram Eshet-Alkalai The Open University of Israel, <u>yorames@openu.ac.il</u>

Raanana, Israel

ABSTRACT

Aim/Purpose This preface presents the papers included in the ninth issue of the *Interdiscipli*-

nary Journal of e-Skills and Lifelong Learning (IJELL) special series of selected

Chais Conference best papers.

Background The Chais Conference for the Study of Innovation and Learning Technologies: Learning in

the Technological Era, is organized by the Research Center for Innovation in Learning Technologies, The Open University of Israel. The 12th Chais Conference was held at The Open University of Israel, Raanana, Israel, on February 14-15, 2017. Each year, selected papers of the Chais conference are expanded

and published in IJELL.

Methodology A qualitative conceptual analysis of the themes and insights of the papers in-

cluded in the ninth selection of IJELL special series of selected Chais Confer-

ence best papers.

Contribution The presentation of the papers of this selection emphasizes their novelty, as

well as their main implications, describes current research issues, and chronicles the main themes within the discourse of learning technologies research, as re-

flected at the Chais 2017 conference.

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^{*} Corresponding author

Findings Contemporary research goes 'beyond the walls of the classroom' and investi-

gates systemic and pedagogical aspects of integrating learning technologies in

education on a large scale.

Recommendation Researchers are encouraged to investigate broad aspects of seizing the oppor-

for Researchers tunities and overcoming the challenges of integrating innovative technologies in

education.

Impact on Society Effective application of learning technologies has a major potential to improve

the well-being of individuals and societies.

Future Research The conceptual analysis of contemporary main themes of innovative learning

technologies may provide researchers with novel directions for future research

on various aspects of the effective utilization of learning technologies.

Keywords learning technologies, e-learning, technology integration in education, added

value of technology for teaching, learning, and assessment, diffusion of innovation, human-computer interaction, lifelong learning, educational technologies

research

INTRODUCTION

"... This is the room where we sat and learned. The windows of a classroom always open to the future..." (Amichai, 1998, pp. 72-73)

This introduction to the ninth selection of the *Interdisciplinary Journal of e-Skills and Lifelong Learning* (IJELL) Special Series of Chais Conference Best Papers, titled *Beyond the Walls of the Classroom*, is a tribute to the poem *The School Where I Studied* by the Israeli poet, Yehuda Amichai (1998).

The papers in this selection investigate issues beyond the walls of the traditional classroom in multiple dimensions. First, the papers examine innovative ways of learning and teaching enabled by contemporary information and communication technologies (ICT), which are not restricted to a brick-and-mortar classroom. These include a virtual high school, massive open online courses (MOOCs), and a school where all the classrooms are paperless. Second, the papers, which are based on quantitative, qualitative, or mixed-methods methodologies, relate to more than one class. Furthermore, some longitudinal studies expand over two or more years. Third, the papers relate to skills, of both students and teachers, which are currently required and will be needed in the future for coping in the modern environment as well as for lifelong learning. More aspects of going beyond the walls of the classroom are reflected in the presentations of the papers in the following section.

However, before discussing the papers, we briefly introduce the Chais conferences and the IJELL special series. The Research Center for Innovation in Learning Technologies (formerly, the Chais Research Center), at The Open University of Israel, launched in 2006 a series of annual national research conferences on innovation and learning technologies, entitled "Learning in the Technological Era". The goal of the Chais conference is to promote the community of Israeli researchers in the field of learning technologies and the positioning of the Open University of Israel as a leading organization in the research and implementation of learning technologies.

The purpose of the special series of selected Chais conference best papers is to increase the international impact of the conference by distributing enhanced, extended versions of its finest papers to a global audience. The Informing Science Institute (ISI) supports this effort by publishing this special series in the *Interdisciplinary Journal of e-Skills and Lifelong Learning* (IJELL, formerly *Interdisciplinary Journal of E-Learning and Learning Objects* (IJELLO)). Geri, Blau, Caspi, Kalman, Silber-Varod, and Eshet-Alkalai (2015) elaborate on the mission and activities of the Research Center for Innovation in Learning Technologies and describe its synergies with the Informing Science Institute, the informing science transdiscipline (Cohen, 1999, 2009; Cohen & Lloyd, 2014), and IJELL. This preface chronicles the main themes within the discourse of learning technologies research, as reflected at the Chais

2017 conference. Geri et al. (2015) portray the objectives and themes of the first decade of the Chais conferences, along with the first seven issues of the IJELL special series of selected Chais Conference best papers. The eleventh Chais conference and its respective IJELL selection are depicted by Geri, Blau, Caspi, Kalman, Silber-Varod, and Eshet-Alkalai (2016).

The twelfth Chais Conference for the Study of Innovation and Learning Technologies: Learning in the Technological Era, was held at The Open University of Israel, Raanana, Israel, on February 14-15, 2017. The opening keynote guest lecturers were Daphna Oyserman (University of Southern California), who talked about "Using Technology to Improve Academic Success by Increasing Identity-Based Motivation", and Erran Carmel (American University, Washington DC), whose lecture title was "The Future of Work and the Workplace and Some Implications for Lifelong Learning". The first day of the conference ended with a keynote by Yair Levy (Nova Southeastern University) on "Cybersecurity and Social Engineering: Growing Threats".

Chais Conference 2017 concluded with a special discussion panel in memory of the late Gavriel Salomon, who was among the pioneers of educational technologies research, for which he received the Israel National Award for life long achievements in educational research. The session was opened with an introduction by Gavriel (Gabi) Salomon's daughter, Merav Salomon. The panel, titled "critical thinking on the integration of technology in learning", was mediated by Sheizaf Rafaeli, and included Amnon Dekel, Yuval Dror, and Yoram Eshet-Alkalai.

CHAIS CONFERENCE 2017 BEST PAPERS

This section presents the papers of the ninth issue of the IJELL special series of selected Chais Conference best papers. In its twelfth year, 93 papers were submitted for presentation at the Chais conference. The submissions went through a double-blind peer-review process, after which 36 papers and 42 posters were accepted for presentation at the conference and published in the proceedings volume of the conference (Eshet-Alkalai, Blau, Caspi, Geri, Kalman, & Silber-Varod, 2017). The Best Student Paper Award was awarded for the sixth time this year and considered 16 student-based research papers. However, none of the seven finalists for the award is included in the current IJELL special series. This selection encompasses six of the top Chais conference 2017 papers that have been expanded, undergone a full review process by IJELL's editors and reviewers, and edited for publication in IJELL.

The opening paper by Olzan Goldstein and Bertha Tessler, "The impact of the national program to integrate ICT in teaching in pre-service teacher training", demonstrates educational technologies research that goes 'beyond the walls of the classroom' in several facets. Their study is based on survey results obtained from 2,324 pre-service teachers who studied in several colleges of education, and were collected at the beginning of the program implementation in 2013, as well as two years afterwards. Goldstein and Tessler's (2017) study provides evaluation of the national change process and highlights the factors that promote successful implementation of ICT in education. Their study concludes that it is important that educators of the pre-service teachers would be skilled in using innovative methods of integrating ICT in teaching.

The second paper by Smadar Bar-Tal and Christa Asterhan, "Going behind the scenes at teacher colleges: Online student knowledge sharing through social network technologies", examined informal (i.e., behind the scenes) knowledge sharing by students at a teacher college via social networks (SNs). The qualitative study of Bar-Tal and Asterhan (2017) involved 37 participants who took part in a focus group or were interviewed. Their findings revealed that knowledge sharing via SNs is a pervasive phenomenon, which caused changes in learning practices. However, Bar-Tal and Asterhan's (2017) attempt to follow-up and discuss the findings with college instructors indicated unawareness of the teachers. The study implies that changes in teaching formats and task assignments should be considered in order to decrease the downsides of learning materials sharing via SNs.

The next paper, by Miri Shonfeld and Hagit Meishar-Tal, "The voice of teachers in a paperless class-room", also adopts a qualitative methodology and goes beyond the walls of the classroom by probing the diverse implications of a paperless school policy. The study was based on interviews of 12 teachers who teach in a paperless school. The study of Shonfeld and Meishar-Tal (2017) demonstrates that the teachers developed a rationale for justifying a paperless school, as it prepares students for their future and imparts them with 21st century learning skills. Nevertheless, the teachers are aware of the challenges and voice their critical views as well as the need to adjust teaching methodologies to the paperless classroom.

The paper of Sara Genut and Yifat Ben-David Kolikant, titled "Undergraduate Haredi students studying computer science: Is their prior education merely a barrier?" examines the issue of lifelong learning in the context of pursuing new fields of study among ultraorthodox Jewish men. Genut and Ben-David Kolikant (2017) argue that the former background of diverse students, which sometimes excludes formal general education but may include other practices and knowledge, should not be regarded only as a weakness, but also as a source of strengths that may help them acquire new knowledge. Genut and Ben-David Kolikant (2017) used a mixed-methods methodology and compared a group of 58 ultraorthodox men and a group of 139 men with a conventional background. Both groups studied Computer Science at the same college and took the same exams. Their findings showed that the grades of the ultraorthodox group did not fall below the grades of the other group over the entire period of five semesters that was examined. It should be noted that the ultraorthodox students had taken a one-year preparatory course, and further discussion is provided in the paper. Notwithstanding, the paper presents important insights that may help in successfully extending the diversity of students in higher education.

The next paper, "A learning analytics approach for evaluating the impact of interactivity in online video lectures on the attention span of students", by Nitza Geri, Amir Winer, and Beni Zaks, examines a special sort of MOOCs. Their study examined two MOOCs, developed by the Open University of Israel as an initiative of the Israeli Council for Higher Education, intended to impart Israeli students with the knowledge required for passing the national English exemption exam. Geri at al. (2017) investigated how adding interactivity to online video lectures affects students' attention span. Their study demonstrates the potential of learning analytics as a methodology for improving instructional design.

The last paper, by Yaniv Biton, Sapir Fellus, Dafna Raviv, and Osnat Fellus, "Yours virtually: Advanced mathematics and physics in the Israeli virtual high school", examines the implications of this innovative learning environment from the perspectives of both students and teachers. It describes the first Israeli Virtual High School (VHS), launched in 2012. The VHS aimed at increasing the numbers of students who opt for advanced level mathematics and physics classes, by enabling students living in peripheral areas to study these subjects online. However, Biton et al. (2017) emphasize the importance of employing a teacher-tutor model of instruction, along with ongoing evaluation of the students' work via a Learning Management System (LMS), and continual teacher-developer interaction for developing cutting-edge content. Their paper provides important insights on effective teaching and learning in a VHS environment.

The six diverse papers of this selection demonstrate some of the important themes deliberated at the Chais conference 2017. Other main themes, which were discussed at the conference included: literacy and digital learning; simulating scientific processes; psychological effects and assistive technologies for people with special needs; learning as an experience; and reading and writing in digital environments.

CONCLUSION AND ACKNOWLEDGEMENTS

The ninth selection of IJELL special series of the Chais conference best papers focused on themes and processes that occur beyond the walls of the traditional classroom. It continues the trend of research that concentrates on pedagogical aspects of learning technologies, as observed by Silber-Varod, Eshet-Alkalai, and Geri (2016). The papers in this year's selection demonstrate the progress of educational technologies research by examining broad samples of both students and instructors, as opposed to studies that analyze the effect of technological interventions on small groups of students. Furthermore, the research questions address novel aspects of integrating technologies in teaching and learning at a national level, such as extending the diversity of students in highereducation, training of pre-service teachers, MOOCs for supporting formal higher education, and a virtual high school that enables geographically dispersed students to take advanced courses of mathematics and physics.

The coming Chais conference for the study of innovation and learning technologies will be held on February 20-21, 2018, at the Open University of Israel campus in Raanana, Israel. We look forward to continuing this important discourse at the conference and the subsequent IJELL issue of the best papers series.

We would like to express our deep gratitude to Fay Sudweeks, the Editor-in-Chief of the *Interdisciplinary Journal of e-Skills and Lifelong Learning*, and to Jon Webber and Janice Whatley, the associate Editors-in-Chief of IJELL, for conducting this editorial effort and for their constructive guidance of the authors. Special thanks to Janice Whatley for leading this initiative since 2012 and for providing dozens of authors with insightful feedback. We highly appreciate the continuing support of this special series by Eli Cohen and Betty Boyd of the Informing Science Institute, and we thank Betty for the publishing work.

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Finally, we are thankful to the community of Israeli researchers and practitioners of learning technologies, for their continuing involvement in Chais conferences, and for their collaboration in developing the educational technologies research field.

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BIOGRAPHIES



Nitza Geri is an Associate Professor at the Open University of Israel, Department of Management and Economics, and Head of the Research Center for Innovation in Learning Technologies. She holds a B.A. in Accounting and Economics and a Ph.D. in Technology and Information Systems Management from Tel-Aviv University. Nitza is a CPA (Israel) with over 12 years of business experience. Her research interests focus on the value of information and knowledge: strategic information systems, information economics, attention economy, knowledge management, value creation, Theory of Constraints, and effectiveness of e-learning. Personal site: http://www.openu.ac.il/en/personalsites/NitzaGeri.aspx



Ina Blau is a Senior Lecturer in the Department of Education and Psychology at the Open University of Israel. She holds a Ph.D. in E-Learning and Cyber-Psychology from the University of Haifa, Israel. Her research interests include social aspects of e-communication and eleadership, integration of innovative technologies in K-12, academia and organizations, mobile learning and interaction, digital literacy skills, online privacy in social networking, and psychological ownership in ecollaboration. Personal site: http://www.openu.ac.il/Personal sites/inablau/



Avner Caspi is a Senior Lecturer at the Open University of Israel, Department of Education & Psychology. He holds a B.A. in Behavioral Sciences (Tel-Aviv Yaffo Academic College), and Ph.D. in Cognitive Psychology (Tel Aviv University). His major research and publications interests focus on social aspects of communication technologies, mainly in the area of learning and instruction. Personal site:

http://www.openu.ac.il/Personal sites/avner-caspi.html

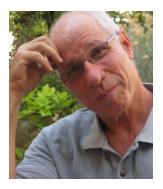


Yoram M Kalman is an Associate Professor at The Open University of Israel's department of Management and Economics. He studies the impact of digital technologies on people, organizations and society. His research focuses on aspects of computer-mediated communication (CMC), human-computer interaction (HCI), information systems (IS) and computer supported cooperative work (CSCW). Yoram led the Open University's massive online open courses (MOOC) initiative, and was the founding CEO of the Open University's subsidiary, Online Academe Ltd. Personal site: http://www.kalmans.com.



Vered Silber-Varod is a Research Fellow at The Open Media and Information Lab (OmiLab), The Open University of Israel, Ra'anana. She is the former Research Fellow of The Research Center for Innovation in Learning Technologies, at the Open University. She holds a B.A. in Political Science and French language and literature studies (Hebrew University of Israel), M.A. with Magna Com Lauda in Hebrew language studies (Tel Aviv University), and Ph.D. in Hebrew linguistics (Tel Aviv University). Previously, she was a researcher at the ACLP - Afeka Center for Language Processing, Afeka College of Engineering. Her research interests include speech prosody, acoustic phonetics, speech technologies, and written and spoken text analytics. Personal site:

http://www.openu.ac.il/en/personalsites/VeredSilberVarod.aspx



Yoram Eshet-Alkalay is a Professor at the Open University of Israel, Department of Education & Psychology. He is Head of the M.A. program in educational technology, and the former Head of the Research Center for Innovation in Learning Technologies in the Open University. He holds a B.A. in Archeology (Hebrew University), M.Sc. in Geology (Hebrew University) and Ph.D. in Earth & Environmental Sciences (City University of NY). For a decade, he was the Head of the Instructional Design Program in the Tel Hai Academic College, and a senior researcher in the Geological Survey of Israel. He has more than 15 years of experience in developing technology-based instructional solutions for educational systems in Israel and the USA. In this capacity, he was involved in

the design of hundreds of simulations, data-bases, tutorials and large-scale curriculum integration projects. His major research and publications interests focus on cognitive aspects of working with digital technologies, digital literacy, digital games, digital dishonesty, and design principles of computer-based learning environments. Personal site: http://www.openu.ac.il/Personal sites/yoram-eshet.html