

המרכז לחקר חדשנות בטכנולוגיות למידה
Research Center for Innovation
in Learning Technologies



The Open University of Israel

**Research Center for Innovation in Learning
Technologies**

ANNUAL REPORT

2011

Prepared by Dr. Ina Blau and Prof. Yoram Eshet- Alkalai



Contents

1. Introduction.....	3
Structure and mode of operation.....	4
2. Research Seminars, Symposia and Conferences	5
Research Seminars.....	5
Symposia	6
Conferences	7
3. Publications.....	9
Publications in Refereed Journals and Book Chapters	9
Conference Presentations.....	12
4. Research projects	18
5. Research center members.....	23

1. Introduction

As a university based on distance learning, the Open University of Israel is committed to the ongoing examination and improvement of its teaching quality through the integration of innovative learning and teaching technologies. The Research Center for Innovation in Learning Technologies functions as the research division of the Open University for exploring emerging technologies and developing models and strategies for their integration in learning. It supports studies conducted by its members and by their students. The Innovation Center conducts a large variety of ongoing academic activities such as symposia, workshops, conferences, and research seminars. It conducts international activities, such as collaboration with *EDEN* - the European Distance Education Network, and publishing conference papers in a special issue of *IJELLO - Interdisciplinary Journal of E-Learning and Learning Objects*.

The Innovation Center was founded in 2003, as the Chais Research Center for the Integration of Technology in Education, with by a donation from the late Mr. Stanley Chais. In 2010, following the cessation of the donation, the Chais Center was closed and was substituted by the present Research Center for Innovation in Learning Technologies.

The following are some of the research fields in which the Innovation Center is engaged:

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

into education systems, academia, and organizations.

It operates in close collaboration with *Shoham* - The Center for Integration of Technologies in Distance Education at the Open University of Israel, whose Director is a member of the Innovation Center's Management.

Structure and mode of operation

The Research Center for Innovation in Learning Technologies operates as an independent unit under the auspice of the university's Dean of Research Affairs and is headed by a senior faculty member of the Open University. It consists of about 40 members from various academic departments, one part-time research associate and one guest scientist.

The Innovation Center funds research and other professional activities conducted by its members, as well as by outstanding graduate students who specialize in learning and information technologies.

Organizational structure (as of 2011)

- **Head of the Center:** Prof. [Yoram Eshet-Alkalai](#)
- **Research Fellow:** Dr. [Sigal Eden](#)
- **Guest Scientist:** Dr. [Paul Gorsky](#)
- **Management:** Prof. Yoram Eshet-Alkalai (Chair), Dr. Avner Caspi, Dr. Nitza Geri, Dr. Yoram Kalman, Prof. Arie Scoop, Ms. Edna Tal, Prof. Yoav Yair
- **Research Committee members:** Dr. Ronit Bogler (Chair), Dr. Diamanta Benson-Karai, Dr. Gal Ben Yehuda, Dr. Reli Brickner, Dr. Tal Hassner, Ms. Eva Klein-Friman (Secretary)
- **Secretary:** Ms. Osnat Tsarfati
- **Web Master:** Ms. Batsheva Engelberg-Behr
- **Website:** <http://www.openu.ac.il/innovation/about.html>

2. Research Seminars, Symposia and Conferences

Research Seminars

As mentioned above, the Research Center for Innovation in Learning Technologies conducts regular research seminars in which researchers present their research studies on learning technologies. The following lectures were delivered in 2011:

Dr. Yuval Kalish (Tel Aviv University): [Knowledge formation in inter-organizational networks: The balance between innovation and knowledge protection.](#) 3.1.11

Dr. Arik Ragovski (Wayne State University). [Organizational maturity for the implementation of information technologies: A measure of organizational readiness for effective technology adoption.](#) 14.3.11.

Dr. Lizi Cohen (Bar Ilan University). [Measuring the potential of innovative thinking in the development of technologies.](#) 16.5.11

Ms. Iris Adato & Ms. Dana Caspi-Tzahor (Open University). [Assistive technologies in the service of students at the Open University of Israel.](#) 20.6.11

Dr. Tal Hassner (Open University). [Watch the watchers: How adults with ADHD watch online video lectures?](#) 7.11.11.

Dr. Ina Blau (Open University). [Class journal in smartphone? Pedagogical management through cellphone.](#) 19.12.11

Symposia

As part of our reaching-out efforts to the academic community, both in the Open University of Israel and in other academic institutes, as well as to the general public, in 2011, the Research Center for Innovation in Learning Technologies conducted a series of symposia which were open to the public. Each symposium focused on selected issues concerning innovative technologies and their impact on our society. The events were broadcast live, drew wide attention and were very well attended. Lectures are available on the Innovation Center's website. The following symposia were conducted in 2011:

[From Gutenberg to Google: Milestones in the History of Books \(13.2.11\):](#)

- **Dr. Avriel Bar Levav** (Open University): The book as an object from the Middle Ages to the Internet Era
- **Dr. Oren Soffer** (Open University): Personal expression in the digital arena
- **Prof. Hannah Adoni** (Hebrew University): On Gutenberg's shoulders: The act of reading in the 21st Century
- **Prof. Yoram Eshet-Alkalai** (Open University): Literacy and technological determinism
- **Mr. Avi Warshawtzky** (Center for Educational Technology): Who killed the author?
- **Dr. Yehuda Meltzer** (publisher): Between the Frankfurt Book-Fair and Lost Atlantis
- **Prof. Yoav Yair** (Open University): From a pocket book in the coat to entire library in the rucksack.

[Out of the Box: Innovative Thinking in a Technological World \(30.3.11\):](#)

- **Dr. Aharon Schwartz** (Teva): Innovation in the Pharmaceutical industry
- **Mr. Yarden Ben-Horin** (Branco-Weiss Institute): Is there an innovative thinking?

- **Dr. Yoram Kalman** (Open University): Innovation management: How is it managed?
- **Dr. Iris Ginzburg** (Demaya): The service sectors in an innovative world
- **Mr. Daniel Campbell** (Better Place): An electrical future.

Trapped in the Net: Dynamics in Social Networks (21.11.11):

- **Prof. Karin Nahon** (University of Washington): Power dynamics in the flow of information in networks
- **Dr. Tehila Altschuller** (The Israel Democracy Institute): Facebook or Failbook: Social Media as a lever for public participation in decision-making in the era of open governance
- **Dr. Yuval Dror** (Management College): All of us are social media: What happens when many talk to many?
- **Panel Discussion: Social networks as augmented reality**
 - **Mr. Eyal Gefen** (Gefen Productions)
 - **Prof. Gustavo Mesh** (University of Haifa)
 - **Ms. Tami Neutal** (Open University)
 - **Mr. Yoav Pridor** (Bazilla)

Conferences

Learning in the Digital Era: The 6th Annual Research Conference of the Research Center for Innovation in Learning Technologies (17.2.2011)

http://www.openu.ac.il/research_center/chais2011/papers.html

The sixth annual research conference entitled "Learning in the Digital Era" was held on the 17.2.2011. The conference received a very positive response from the academic and professional community, with a very high attendance (~ 500 participants) and submissions (~70 submitted papers). It was conducted at the Open University campus, with forty lectures and a poster session.

- **Keynote lecture: Mr. Santiago de la Mora** (Director of Print Content: Partnerships for Google in Europe, Middle East, and Africa): Google books: Choice and reach in the Internet age
- **Closing lecture: Dr. Tal Hassner** (Open University): Computers that can see: On computerized vision.

All Papers were published in a special Proceedings volume. Extended versions of the best papers were published in a special issue of IJELLO: *Interdisciplinary Journal of E-Learning and Learning Objects*.

Lectures and papers are available at:

http://www.openu.ac.il/research_center/chais2011/papers.html

3. Publications

Publications in Refereed Journals and Book Chapters

- Avidov, O. & Eshet-Alkalai, Y. (2011). Teachers in a world of change: teachers' knowledge and attitudes towards the implementation of innovative technologies in schools. *Interdisciplinary Journal of E-Learning and Learning Objects*, 7, 291-303.
- Avidov-Ungar, O. & Eshet-Alkalai, Y. (2011). The Islands of innovation model: Opportunities and threats for effective implementation of technological innovation in the Education System. *Issues in Informing Science and Information Technology*, 8, 363-376.
- Basri, R., Hassner, T., & Zelnik-Manor, L. (2011) Approximate Nearest Subspace Search, *IEEE Trans. on Pattern Analysis and Machine Intelligence (TPAMI)*, 33(2), 266-278.
- Blau, I. (2011). Application use, online relationship types, self-disclosure, and Internet abuse, among children and youth: Implication for education and Internet safety programs. *Journal of Educational Computing Research*, 45, 95-116.
- Blau, I. (2011). E-collaboration within, between, and without institutions: Towards better functioning of online groups through networks. *International Journal of e-Collaboration*, 7, 22-36.
- Blau, I. (2011). Teachers for "Smart classrooms": The extent of implementation of an interactive Whiteboard-based professional development program on elementary teachers' instructional practices. *Interdisciplinary Journal of E-Learning and Learning Objects*, 7, 275-289.
- Blau, I., & Barak, A. (2011). Optimization of e-learning: The contribution of personality traits. In D. Chen, & G. Kurtz (Eds.), *ICT, learning and teaching* (pp. 61-84). Or Yehuda: Center for Academic Studies [in Hebrew].

- Caspi, A., & Blau, I. (2011). Collaboration and psychological ownership: How does the tension between the two influence perceived learning? *Social Psychology of Education, 14*(2), 283-298.
- Caspi, A., & Blau, I. (2011). Media choice for intra-school communication: The role of environment, user, and medium. *Journal of Educational Multimedia and Hypermedia, 20*(4), 337-360.
- Eden, S. & Betzer, M. (2011). Three-dimensions vs. two-dimensions intervention programs: The effect on the mediation level and behavioural aspects of children with intellectual disability. *European Journal of Special Needs Education, 26*(3), 337-353.
- Eden, S. & Heiman, T. (2011). The influence of CMC on social support of students with and without learning disabilities. *Educational Technology and Society, 14*(2), 89-97.
- Eden, S., Kurtz, G. & Mevarech, Z. (2011). The influence of metacognitive guidance on students' achievements in fully online course. In D. Chen, & G. Kurtz (Eds.), *ICT, learning and teaching* (pp. 149-162). Or Yehuda: Center for Academic Studies [in Hebrew].
- Eden, S., Shamir, A., & Fershtman, M. (2011). The effect of using laptops on the spelling skills of students with learning disabilities. *Educational Media International, 48*(4), 249 - 259.
- Eshet-Alkalai, Y., Caspi, A., Eden, S. Geri, N., & Y. Yair (Eds.) (211). *Learning in the Technological Era VI: Proceedings of the 6th Chais Conference on Instructional Technologies Research, 2011, 17.2. 2011, Ra'anana, The Open University of Israel, 393 p.*
- Geri, N. (2011). If we build it, will they come? Adoption of online video-based distance learning. *Interdisciplinary Journal of E-Learning and Learning Objects, 7*, 225-234.
- Geri, N., & Geri, Y. (2011). The information age measurement paradox: Collecting too much data. *Informing Science Journal, 14*, 47-59.
- Geri, N., Yair, Y., Caspi, A., Eden, S. & Eshet-Alkalai, Y. (2011). Learning and Teaching in the Technological Era: Introduction to the IJELLO

- Special Series of Chais Conference 2011 Best Papers. *Interdisciplinary Journal of E-Learning and Learning Objects*, 7, 205-211.
- Guri-Rosenblit, S. & Gros, B. (2011). E-learning: Confusing terminology, research gaps and inherent challenges. *Journal of Distance Education*, 25 (1). <http://www.jofde.ca/index.php/jde/article/view/729>
- Guri-Rosenblit, S. (2011). Five reasons for the reluctance of academic faculty to employ a web-enhanced teaching. In G. Trentin & M. Repetto (Eds.) *Faculty training for web-enhanced learning* (pp.37-48). New York: Nova Science.
- Ingber, S. & Eden, S. (2011). Enhancing sequential time perception and storytelling ability among deaf and hard-of-hearing children. *American Annals of the Deaf*, 156(4), 391–401.
- Kalman, Y. M. & Rafaeli, S. (2011). Online pauses and silence: Chronemic expectancy violations in written computer-mediated communication. *Communication Research*, 38(1), 54-69.
- Meishar-Tal, (2011). Developing and executing wiki based collaborative assignments in online distance education. In D. Chen & G. Kurtz (Eds.), *ICT, learning and teaching* (pp. 451-466). Or-Yehuda: The Center for Academic Studies. [In Hebrew].
- Meishar-Tal, H. (2011) Developing and executing wiki based collaborative assignments, *Eureka*, 32.
<http://www.matar.ac.il/eureka/newspaper32/docs/05.pdf> [Hebrew].
- Meishar-Tal, H., Tal-Elhasid, E., & Yair, Y. (2011) Systemic aspects of the implementation of Wikis in Higher Education, In D. Chen, & G. Kurtz (Eds.) *ICT, learning and teaching* (pp. 297-310). Or-Yehuda: The Center for Academic Studies. [Hebrew].
- Tickotsky, N., Moskovitz, M., & Caspi, A. (2011). Dentists' attitudes toward discussing Internet health information with their patients - does professional self efficacy matter? *Journal of Public Health Dentistry*, 71(2), 102-105.

Wolf, L., Hassner, T. & Taigman, Y. (2011) Effective face recognition by combining multiple descriptors and learned background statistics. *IEEE Trans. on Pattern Analysis and Machine Intelligence (TPAMI)*, 33(10), 1978-1990.

Conference Presentations

Almeida, A., Välimäki, M., Debutie, G., Heiman, T., Olenik Shemesh, D., O Moore, M., & Sygkolitou, E. (2011). *A Transnational analysis of published guidelines for cyberbullying prevention: Experts' ratings of strengths and weaknesses*. Paper presented at the 15th European Conference in Developmental Psychology. University of Bergen, Norway.

Avidov-Ungar, O. & Eshet-Alkalay, Y. (2011). Islands of Innovation in education: Opportunities and risks in effective technology-integration in educational systems. In Y. Eshet-Alkalai, A. Caspi, S. Eden, N. Geri & Y. Yair (Eds.), *Learning in the technological era* (pp.11-22). Ra'anana: The Open University of Israel,. [in Hebrew].

Blau, I. (2011). Application use, online behavior, and e-learning survey among children and youth: In favor of online safety, against Internet abuse. In Y. Eshet-Alkalai, A. Caspi, S. Eden, N. Geri, & Y. Yair (Eds.), *Learning in the technological era* (pp. 75-84). Ra'anana, Israel: The Open University of Israel. [in Hebrew].

Blau, I. (2011). Being a smart teacher in a "Smart classroom": Assessing teacher professional development for incorporating Interactive WhiteBoards at schools. In Y. Eshet-Alkalai, A. Caspi, S. Eden, N. Geri, & Y. Yair (Eds.), *Learning in the technological era* (pp. 63-74). Ra'anana, Israel: The Open University of Israel. [in Hebrew].

Blau, I. (2011). *Google Apps meet the academia one-to-one*. Paper presented at the 9th MEITAL National Conference. Tel-Aviv, Israel: Tel-Aviv University. [in Hebrew].

- Blau, I. (2011). *Who's afraid of one-time contribution? Using Wikis in education, organizations, and companies: Collaborating openly and exploring the potential of the "long tail" network distribution*. Paper presented at the 3rd Annual Conference Wikipedia Academy 2011. Haifa, Israel. [in Hebrew].
- Blau, I. (2011). *Smartphone: The intersection of pedagogical management and learning management systems*. Paper presented at Moach- Israeli Association for Information Technologies in Education Annual Conference. Tel-Aviv, Mofet Institute. [in Hebrew].
- Blau, I. (2011). *Children, risk, and safety online: Israeli survey results among Hebrew and Arabic speakers*. Paper presented at the International Conference EU Kids Online: Children, Risk and Safety Online - Research and Policy Challenges in Comparative Perspective. London, UK: The London School of Economics and Political Science- LSE.
- Blau, I., & Hameiri, M. (2011). Online parental involvement in the 21st century: Students and parents using the "Mashov" Learning Management System. In Y. Eshet-Alkalai, A. Caspi, S. Eden, N. Geri, & Y. Yair (Eds.), *Learning in the technological era* (pp. 55-62). Ra'anana, Israel: The Open University of Israel. [in Hebrew].
- Caspi-Tsahor, D., Heiman, T., & Olenik-Shemesh, D. (2011). *Assistive technology for students with blindness or visual impairments: Academic and social contributions*. Poster presented at SITE 2011: The 22nd annual conference of the Society for Information Technology and Teacher Education. Nashville, Tennessee.
- Caspi-Tsahor, D., Heiman, T., & Olenik-Shemesh, D. (2011). *Blind and visually impaired students in Higher Education: Coping modes*. Paper presented at Beit Issie Shapiro's 5th International Conference on Disabilities: Learning from the Past, Shaping the Future. Tel Aviv, Israel.
- Eden, S., Weiss, P. L., Gal, E. & Zancanaro, M. (2011). *Social Competence Training for Children on the Autism Spectrum Disorder Using Multi-*

Touch Tabletop Surface: A Usability Study. Paper presented at the Joint Virtual Reality Conference. Nottingham UK.

- Elgali, Z., & Kalman, Y. M. (2011). *Effects of ICT fashions on national educational technology policy*. Paper presented at the 6th Mediterranean Conference on Information Systems, Limassol, Cyprus.
- Elgali, Z., & Kalman, Y. M. (2011). Three Decades of National ICT Programs in the Israeli Education System. In Y. Eshet-Alkalai, A. Caspi, S. Eden, N. Geri, & Y. Yair (Eds.), *Learning in the technological era* (pp. 31-37). Ra'anana, Israel: The Open University of Israel. [in Hebrew].
- Geri, N. (2011, September). *Managing the attention Constraint*. Paper presented at the 6th Mediterranean Conference on Information Systems (MCIS). Limassol, Cyprus.
- Geri, N. (2011). Students' adoption of online video-based distance learning. In Y. Eshet-Alkalai, A. Caspi, S. Eden, N. Geri, & Y. Yair (Eds.), *Learning in the technological era*: (pp. 21-27). Ra'anana, Israel: The Open University of Israel.
- Geri, N., Gonen, R. (2011). Reducing free exposure in sponsored search auctions. In N. Geri, & Y. Kalman (Eds.), *Proceedings of the 5th Israel Association for Information Systems Conference (ILAIS 2011)* (pp. 22-25).
- Gorsky, P. (2011). Hidden structures in asynchronous course forums: Toward a golden ratio population parameter. In *Proceedings of 9th International Conference on Computer Supported Collaborative Learning: Connecting Computer Supported Collaborative Learning to Policy and Practice* (pp. 862-864). Center for Information Technology in Education, University of Hong Kong, Hong Kong.
- Gorsky, P., Caspi, A., Blau, I., & David, Y. (2011). Toward a population parameter for "Communities of Inquiry" in higher education, asynchronous course forums. In Y. Eshet-Alkalai, A. Caspi, S. Eden, N. Geri, & Y. Yair (Eds.), *Learning in the technological era* (pp. 28-30). Ra'anana, Israel: The Open University of Israel.

- Guri-Rosenblit S. (2011). *Digital technologies in distance teaching universities*. An invited lecture at the International Advisory Board Meeting. The Open University of Portugal, Lisbon.
- Guri-Rosenblit S. (2011). *The future university: Moving from a state system to a glocal landscape*. A keynote at the International Colloquium on Between Knowledge and Power. The University in the Face of State Transformation, Wroclaw, Poland.
- Guri-Rosenblit S. (2011). *Online universities: What parameters for ranking?* An invited lecture at the First International Seminar on Higher Education Rankings and E-Learning. Barcelona, Spain.
- Heiman, T., Olenik-Shemesh, D., & Eden, S. (2011). *Virtual violence: Examining teachers' ways of coping with pupils cyber bullying*. Paper presented at the 3rd international conference "Open the Teachers' Gates: Education at the Globalization area". Tel Aviv, Israel.
- Kalman, Y. M. (2011). *HCI markers and their usefulness in monitoring personal health*. Paper presented at the 5th conference of the Israel association for information systems (ILAIS). Ra'anana, Israel.
- Kalman, Y. M. (2011). *HCI Markers: A conceptual framework for using human-computer interaction data to detect disease processes*. Paper presented at the 6th Mediterranean Conference on Information Systems. Limassol, Cyprus.
- Klipper-Gross, O., Hassner, T., & Wolf, L. (2011, September). One shot similarity metric learning for action recognition. In M. Pelillo, & E.R. Hancock (Eds.), *Similarity-Based Pattern Recognition - First International Workshop, SIMBAD* (pp. 31-45). Venice, Italy.
- Meishar-Tal, H. (2011). *What's a Map?* Paper presented at the sixth lexical conference for critical political thought. Tel Aviv, Israel: Tel Aviv University. [in Hebrew].
- Olenik Shemesh. D., Heiman,T., & Piescl, S. (2011). *Adolescents' cyberbullying: Moods, loneliness and social support*. Paper presented

at the 32nd International Conference of the Stress and Anxiety Research Society (STAR). University of Munster, Germany.

Pieterse, E., Barucson-Arbiv, S. & Shoam, S. (2011), *Patterns of adopting technological innovations into teaching, and its relation to the academic culture of Israeli Higher Education institutions*. Paper presented at the 9th Annual MEITAL National Conference, Tel Aviv, Israel: Tel Aviv University. [in Hebrew].

Shilo, R., & Caspi, A. (2011). Caught in the Net - The influence of social network sites on social identification with informal education program. In Y.Eshet-Alkalai, A. Caspi, S. Eden, N. Geri & Y. Yair, (Eds.), *Learning in the technological era* (pp. 239-247). Ra'anana: The Open University of Israel. [in Hebrew]

Tarablus, S., Heiman, T. & Olenik Shemesh, D. (2011). Cyber-bullying vs. face to face bullying among adolescents. In Y. Eshet-Alkalai, A. Caspi, S. Eden, N. Geri, & Y. Yair (Eds.), *Learning in the technological era* (pp. 174-180). Ra'anana, Israel: The Open University of Israel. [in Hebrew]

Tarablus, T., Heiman, T., & Olenik Shemesh, D. (2011). *Cyber bullying among adolescents in Israel*. Paper presented at the 6th COST Action on Cyberbullying Conference: Coping with negative and enhancing positive uses of new technologies. University of Turku, Finland.

Weiss, P.L., Cobb, S., Gal, E., Millen, L., Hawkins, T., Glover, T., Sanassy, D., Eden, S., Giusti, L., & Zancanaro, M. (2011). *Usability of technology supported social competence training for children on the Autism Spectrum*. Paper presented at the International Conference on Virtual Rehabilitation. Zurich, Switzerland.

Weiss, P.L., Gal, E., Eden, S., Giusti, L., & Zancanaro, M. (2011). Usability of a multi-touch tabletop surface to enhance social competence training for children with Autism Spectrum Disorder. In Y. Eshet-Alkalai, A. Caspi, S. Eden, N. Geri, & Y. Yair (Eds.), *Learning in the technological era* (pp. 71-78). Ra'anana: The Open University of Israel.

Wolf, L., Hassner, T., & Maoz, I. (2011). Face recognition in unconstrained videos with matched background similarity. In *Proceedings of the 24th IEEE Conference on Computer Vision and Pattern Recognition* (pp. 529-534). Colorado Springs, Colorado.

4. Research projects

Mobile Pedagogical Management by Teachers and Families

Researchers: Dr. Ina Blau & Dr. Mira Hameiri

This project investigates mobile logins of teachers, students and parents in secondary schools onto a pedagogical management system (PMS). The study compares students, their mothers, and fathers' PMS data usage between schools with frequent, occasional, and no mobile teacher access. Additionally, this project aim to explore gender differences in mobile parental involvement.

Professional Communities of Practice on Twitter

Researchers: Dr. Ina Blau & Ms. Tami Neuthal

This project explores Israeli professional communities of practice using Twitter to connect with similar others. The activities are analyzed in terms of user investments (i.e., participation by tweeting and following others) and gratifications (i.e., influence on the audience: the degree of centrality into the community network measured by the PageRank, number of followers, and tweets marked as favorites).

Are Teachers Open to Change?

Researchers: Dr. Yehuda Peled, & Dr. Ina Blau

This study compares between (1) teachers working in "laptop per student" (1:1 laptop) classrooms (2) "laptop per teacher" project, and (3) teaching without technology. The influence of openness to change and attitudes towards ICT implementation on technology use for communication and searching information by Israeli secondary teachers are investigated.

Patterns of Adopting Technological Innovations into Teaching, and its Relation to the Academic Culture of Israeli Higher Education Institutions (Phd Dissertation)

Researcher: Dr. Efrat Pieterse

The purpose of this research was to identify the patterns of adopting technologies among teachers in institutions of higher education, and the impact of the organizational and academic culture of the institution on these processes. The main conclusions of the research are that the organizational culture has a crucial role in driving the process of change and dissemination of innovation for most of the faculty members. The findings also indicate that the organizational culture does not affect those defined as innovators and has relatively little impact on those defined as laggards, in Rogers' terms, and its main impact is on the late majority and the early majority.

Virtual Anti-Bullying-Village for Kids"

Researchers: Dr. Tali Heiman & Dr. Dorit Olenik Shemesh

The 'Anti-Bullying-Village' (ABV) is a virtual place created by young people for young people in the virtual 3D environment of OpenSim. The ABV project is a cooperative project of experts and schools from Germany, the United Kingdom, Norway, Poland and Israel, supported by IT-experts from Italy and designers from Bulgaria. The project has been funded by the Comenius Program of the European Commission, started in early 2011 and will end at the end of 2012.

At the ABV you can interact with others through avatars, virtual representations of people. In cooperation with schools from Germany, the United Kingdom, Norway, Poland and Israel and young people from across Europe the ABV offers various events on school bullying, violence, racism and xenophobia, such as workshops, film displays, a young people's conference or exhibitions.

Apart from mere entertainment purposes 3D virtual worlds offer an excellent opportunity for computer-assisted learning and communication. The Anti-Bullying-Village consists of different areas and buildings such as a Virtual Parliament, a Virtual School and a Creative Arts Centre – planned and shaped by young people.

CyberTraining-4-Parents

Researchers: Dr. Tali Heiman & Dr. Dorit Olenik Shemesh

The CyberTraining-4-Parents (CT4P) project aims to develop and provide training courses on how to deal with cyberbullying. The training courses will provide introduce into the basics of new media and the latest state of research on cyberbullying. Furthermore, they aim to equip parents with knowledge and strategies on how to cope with cyberbullying.

Apart from three face-to-face training courses for trainers in each of our partner countries – Germany, Ireland, Israel, Norway and Portugal – we will offer two moderated online training courses for trainers. For parents we will provide a self-directed online course.

The project started in December 2010 and ends in November 2012, and has been funded by the Comenius Program of the European Commission.

Cyberbullying and victimization on the Internet: Characteristics, Patterns, Risk Factors and Protective Factors among Children and Adolescents

Researchers: Dr. Tali Heiman, Dr. Dorit Olenik Shemesh & Dr. Sigal Eden

In recent these is growing evidence of a new type of violence/bullying, which is becoming recurrent among children and adolescents – cyberbullying (CB). This kind of se/bullying is characterized by a repetitive behavior over a period of time, abuse of authority or power using computers or cellular phones for sending offensive text messages, clips and pictures. Although this important issue is often covered by the media, up until now it has not been studied extensively in Israel.

The main purpose of the proposed study is to expose the phenomenon of cyberbullying and victimization among children and adolescent populations in Israel, to describe its nature, scope and main characteristics, to examine the points of view of students and educational staff, and to identify risk and protective factors. In addition, the study examines educational, social and emotional aspects in relation to CB. The importance of the study is both in theoretical terms, i.e., the conceptualization of cyberbullying as a phenomenon, and in practical terms, i.e., prevention and intervention. In addition, the study will include the elaboration and validation of research tools that have been developed by research centers in various countries, through their adaptation to Israeli reality. The study population comprises around 1,000 pupils aged 10-17, and about 500 educational teams (educators, teachers, advisors) in various schools around the country.

The study is and being financed by the Chief Scientist of the Ministry of Education and conducted since October 2010.

Facebook as an LMS

Researchers: Dr. Hagit Meishar Tal, Dr. Efrat Pieterse and Dr. Gila Kurtz

This pilot study is an attempt to use a Facebook group as a course website. The researchers conducted a course in which Facebook served as an LMS. After the course ended they distributed questionnaires among the students and asked them to reflect on their experience. The study explores these answers and reflections.

Critical Reading of Google Earth

Researcher: Dr. Hagit Meishar Tal

Google Earth (GE) is an online project of Google that provides a virtual environment simulating the three-dimensional surface of the earth through aerial photos. This virtual environment is another step in the development of computerized mapping tools, but beyond that, embodies principles that characterize the redesign of social space and the culture of the digital age. This study is a critical analysis of the user interface and the content published on Google earth by the users and by Google.

Neuropsychological Profiles from Educational Video Watching Behavior

Researcher: Dr. Tal Hassner, Prof. Lior Wolf, Dr. Anat Lerner & Dr. Yael Leitner)

Our goal in this study is to see how much can we learn about the personalities of students from the manner in which they watch online educational videos. Specifically, by monitoring video watching behaviors such as the number of times PLAY and STOP were pressed while watching the videos, the number of times parts of the video were skipped etc., we may be able to extract meaningful information on the character of each student watching the video. Our preliminary findings show promising potential in singling out students who suffer from

attention deficit disorders and may provide novel means for early screening for this and similar conditions.

Print versus Digital: Aspects of Reading and Writing

Researchers: Dr. Sigal Eden & Prof. Yoram Eshet-Alkalai

The research explores differences in reading and editing text in print and in digital displays. Participants receive newspaper articles in print and in digital formats and are asked to correct errors embedded in them (e.g., typing errors; semantic errors, syntax errors).

Modes of Innovative- Technology Integration in Israeli Schools

Researchers: Dr. Orit Avodov-Ungar & Prof. Yoram Eshet-Alkalai

The research focuses on the different modes of integration of innovative educational technologies in Israeli schools, with a special emphasis on the Islands of Innovation Model.

Games and Aggression: The Impact of Violent Digital Games and Game-strategy on Aggression among Children

Researchers: Ms. Tami Dubi, Dr. Sigal Eden, & Prof. Yoram Eshet-Alkalai.

This study explored the effect of violent and non-violent mass multiplayer games, and the effect game-strategy (competitive vs. collaborative) on the level of aggression among children. Findings show that game strategy had a significant effect on participants' level of aggression. On the other hand, it was found that the presence or lack of violence in the game had no effect on participants' level of aggression.

Teacher's Professionalism (TPACK) and Organizational Learning School Culture

Researchers: Dr. Orit Avidov & Prof. Yoram Eshet-Alkalai

This study examines the relationships between teachers' Technological Pedagogical Content Knowledge - TPACK, their perception of the school as a learning organization, and their attitudes towards the process of change when implementing technological innovation such as the Interactive WhiteBoards. One hundred teachers, involved in a 'smart class' project, completed a questionnaire examining these three variables. The findings show that the teacher's level of professional knowledge and their perception of the school as a learning organization affect teachers' attitudes towards the implementation of change and their belief in the effectiveness of the change.

Moodle Implementation at the OUI: A Pilot Study

Researchers: Dr. Orit Avidov & Prof. Yoram Eshet-Alkalai

This pilot study examines the Technological Pedagogical Content Knowledge - TPACK of OUI instructors and their readiness to implement the MOODLE platform in teaching. The study is conducted as part of the current implementation project of MOODLE as the new LMS at the OUI.

Toward a Community of Inquiry Population Parameter: The Impact of Unit (Sentence vs. Message) on the Results of Quantitative Content Analysis

Researchers: Dr. Paul Gorsky, Dr. Avner Caspi, Dr. Ina Blau, Ms. Yodfat Vine & Ms. Amit Billet

The goal of this study is to further corroborate a hypothesized population parameter for the frequencies of "social presence" versus the sum of "teaching presence" and "cognitive presence" as defined by the "Community of Inquiry" model in higher education, asynchronous course forums. To do so, the same three week segments from 15 Open University undergraduate course forums were analyzed twice - once by the unit "message" and once by the unit "sentence". We found that the hypothesized parameter remained viable when the unit of analysis is the sentence. We also found that the choice of syntactic unit is indeed a critical factor that determines the "content" of the transcript and its inferred meaning.

Manipulating attractiveness in dating profiles

Researcher: Dr. Avner Caspi

In this study, gender differences in changing self-presentation were examined. Participants were asked to create a profile that truly presents them, and then to create a modified profile that aimed to present them more favorably. In the next stage of this study, different participants rated the attractiveness of both profiles. Results revealed that attractive profile are rated to be indeed more attractive. In depth examinations aimed to expose the factors that cause this result.

Game theory in the service of the Open University

Researchers: Dr. Rica Gonen & Dr. Anat Lerner

The project analyzes the potential cooperation in course offering between Open University study centers and an alternative design of game theoretic mechanism for course offering. The suggested mechanism can allow for an efficient course offering layout that will decrease study groups cancelations.

5. Research center members (as of 2011)

Name	Department/Unit	email
Prof. Yoram Eshet-Alkalai (Head, Research Center)	Education & Psychology	✉
Dr. Dorit Olenik-Shemesh	Education & Psychology	✉
Einat Iger	Teachers Professional Development Unit	✉
Bat Sheva Ehngelberg-Behr	Computers Unit	✉
Dr. Avishai Antonovsky	Education & Psychology	✉
Dr. Zippy Erlich	Mathematics and Computer Science	✉
Noa Bauman	Teachers Professional Development Unit	✉
Dr. Ronit Bogler	Education & Psychology	✉
Prof. Ruth Beyth-Marom	Education & Psychology	✉
Dr. Ina Blau	Education & Psychology	✉
Dr. Gal Ben Yehudah	Education & Psychology	✉
Dr. Diamanta Benson-Karhi	Management & Economics	✉
Dr. Relly Rickner	Evaluation & Training	✉
Rivka Gadot	Mathematics and Computer Science	✉
Eti Goder	Evaluation & Training	✉
Dr. Rica Gonen	Management & Economics	✉
Dr. Paul Gorsky	Education & Psychology	✉
Dr. Avikam Gazit	Education & Psychology	✉
Prof. Aviva Geva	Management & Economics	✉
Prof. Sarah Guri-Rosenblit	Education & Psychology	✉
Dr. Ruti Gafni	Management & Economics	✉
Dr. Nitza Geri	Management & Economics	✉
Dr. Tali Heiman	Education & Psychology	✉
Dr. Tal Hassner	Mathematics and Computer Science	✉
Dr. Eran Chajut	Education & Psychology	✉
Dr. Inbal Tuvi-Arad	Natural Sciences	✉
Edna Tal-Elhasid	SHOHAM	✉
Prof. Yoav Yair	Dean, Development & Learning Technologies	✉
Dr. Avner Caspi	Education & Psychology	✉
Dana Caspi-Tsahor	Education & Psychology	✉
Dr. Anat Lerner	Mathematics and Computer Science	✉
Dr. Hagit Meishar-Tal	Education & Psychology	✉

Dr. Oren Soffer	Sociology, Political Science and Communication	✉
Dr. Sigal Eden	Research Associate, Innovation Center	✉
Dr. Efrat Pieterse	Education & Psychology	✉
Karen Spector-Precel	Education & Psychology	✉
Dr. Ela Zur	Mathematics and Computer Science	✉
Dr. Esther Klein-Wohl	English Unit	✉
Dr. Yoram Kalman	Management & Economics	✉
Dr. Rikki Rimor	Education & Psychology	✉
Dr. Becki Shoken	Management & Economics	✉
Gail Shuster-Bouskila	English Unit	✉
Dr. Noan Shental	Mathematics and Computer Science	✉
Anat Sharon	Literature, Language and the Arts	✉