

**BAR-ILAN UNIVERSITY** **FACULTY OF SOCIAL SCIENCE**  
**SCHOOL OF EDUCATION**  
**CURRICULUM VITA**  
**David Passig Ph.D.**

**PERSONAL DATA**

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**I.D :** 012027538  
**Date of Birth:** 7/7/1957  
**Marital Status:** Married + 4

**EDUCATION**

<b>Year</b>	<b>Degree</b>	<b>Institution</b>
1981-5	B.A.	Bar-Ilan University, Israel
1985-7	M.A	Bar-Ilan University, Israel
1988-93	Ph.D.	University of Minnesota, USA

**Ph.D. THESIS:** Reactions to experts' forecasts: Imen-Delphi—An applied social methodology—A variant of the Delphi forecasting technique.

**SUPERVISOR:** Prof. Arthur Harkins

**ACADEMIC AFFILIATIONS/APPOINTMENTS**

<b>Year</b>	<b>Appointment</b>	<b>(Work Percentage)</b>
1993-5	Assistant Lecturer, School of Education	<b>100%</b>
1995-2001	Lecturer	<b>100%</b>
2001-2006	Senior Lecturer (Assistant Professor)	<b>100%</b>
2007-to Date	Associate Professor	<b>100%</b>

- 1999-2000 Visiting Scholar, Stanford University, USA
- Fall 2006 Visiting Scholar, Stanford University, USA
- Winter 2013 Visiting Scholar, Harvard University, USA

### PROFESSIONAL ACTIVITIES: (Memberships/Editorial Activities)

- 2011-to 2012 Guest Editor at the Journal for Cognitive Education and Psychology. Co-editing a special issue on: Cognition and Technology: Theory, Research and Practice. [www.iacep-coged.org](http://www.iacep-coged.org)
- 2010-to date Member, Israel National Council for Research & Development [www.most.gov.il/Departments/NCRD](http://www.most.gov.il/Departments/NCRD)
- 2010-to date Senior Fellow, Center for International Communication, Bar Ilan University.
- 2008-to date Referee in the *Journal for Research in Mathematics Education (JRME)*. The official journal of the National Council of Teachers of Mathematics. It is a forum for disciplined inquiry into the teaching and learning of mathematics. It encourages the submission of a variety of manuscripts: reports of research, including experiments, case studies, surveys, philosophical studies, and historical studies; articles about research, including literature reviews and theoretical analyses; brief reports of research; critiques of articles and books; and brief commentaries on issues pertaining to research.
- 2007-to 2009 Expert evaluators of the proposals submitted under the European call for proposals "**FP7-Science in Society-2007-1**", in particular under the areas "*5.1.1.1 Research on relationship between science, democracy and law*", "*5.1.2.1 Developing governance on science-related questions*" and "*5.1.2.3 Cross Thematic: Energy and Environment and Nanoscience and Nanotechnology*".
- 2007-to Date Referee in the *Computers & Education Journal*. An established technically-based, interdisciplinary forum for communication in the use of all forms of computing in this socially and technologically significant area of application: social issues and gender issues; curricula considerations, graphics, simulations, computer-aided design, computer integrated manufacture, artificial intelligence and its applications including intelligent tutoring systems and computer assisted language learning; hypertext and hypermedia; user interfaces to learning systems; management of technological change on campus and in local education; uses of advanced technology information systems, networks, terrestrial and satellite transmissions and distributed processing; and virtual reality in an educational context. Elsevier Publications. Impact factor: 1.602

- 2006-to Date Referee in the *Teachers College Record*. A journal of research, analysis, and commentary in the field of education. It has been published continuously since 1900 by [Teachers College, Columbia University](#).
- 2006-to Date Referee in the *Journal of Educational Computing Research*. Designed to convey the latest in research reports and critical analyses to both theorists and practitioners, the Journal addresses four primary areas of concern: The outcome effects of educational computing applications, featuring findings from a variety of disciplinary perspectives which include the social, behavioral, and physical sciences; The design and development of innovative computer hardware and software for use in educational environments; The interpretation and implications of research in educational computing fields; The theoretical and historical foundations of computer-based education.
- 2000-to Date Referee in the *Journal of Education and Information Technologies*. The official journal of the IFIP Technical Committee on Education. Ian Selwood (editor in chief), King's College London. Published by Springer.
- 1999-to Date Referee in the *Journal of Applied Systems Studies*. Professor Nikitas Assimakopoulos (editor in chief). University of Athens.
- 2002-to Date Referee in the Journal of New Media *PATUAKH*. Editor in Chief: Prof. Sam Lehman Wilzig. Bar Ilan University.
- 2002-to Date Board Member in the *Journal of Innovations in Education*. Ministry of Education, Israel
- 2000-to Date Member at the Work Group **3.1** of the Technical Committee on Education (TCE), part of the International Foundation for Information Processing (IFIP). This group focuses on Information and Communication Technology (ICT) and education in high school.
- 2000-to Date Member at the Work Group **3.5** of the Technical Committee on Education (TCE), part of the International Foundation for Information Processing (IFIP). This group focuses on Information and Communication Technology (ICT) and education in elementary school
- 2000-to Date Member at the World Futures Studies Federation
- 2000-to Date Association of Professional Futurists (APF)
- 1985-to Date Member at the World Future Society.

**HONORS****Year Source**

2014 First prize of the Israeli Mechatronics Competition for the betterment of human living for Senior High School students – Ort Braude College, Israel.

The prize was awarded to Hodaya Dvora Farjun (Shapira High School Netanya, Israel) who did a research project as part of a study in the VR Lab at Bar Ilan University. She developed a Brain Machine Interface with which a handicap could drive a wheel chair with his/her EEG brain waves.

2013 First steps for Nobel Prize in Physics. International Competition for High School (Lyceum) Students in Research Projects in Physics. Institute of Physics, Polish Academy of Sciences (Warsaw - Poland).

The honor was awarded to Hodaya Dvora Farjun (Shapira High School Netanya, Israel) who did a research project as part of a pilot study in the VR Lab at Bar Ilan University. The topic was "Implementing Priming in a Brain Computer Interface."  
<http://www.ifpan.edu.pl/firststep>

**AWARDS**

<b>Year</b>	<b>Source</b>	<b>Amount</b>
2014	The Bernovsky Award for excellence in Early Childhood Education by Haifa University for the study " <i>Improving children's cognitive modifiability through mediated learning and Dynamic Assessment within 3D Immersive Virtual Reality environments.</i> "	\$ 2,000
2011	The Bernovsky Award for excellence in Early Childhood Education by Haifa University for the study " <i>Solving conceptual and perceptual analogies with Virtual Reality among kindergarten children of emigrant families.</i> "	\$ 2,000
1998	Research award of the Vice President of Research, Bar Ilan University for research in Virtual Reality.	\$ 2,000

**GRANTS**

<b>Year</b>	<b>Source</b>	<b>Amount</b>
2016	Submitting a Research Proposal to ISF for developing a cyber defenders' training program in Virtual Reality.	209,000 NIS x 3

2013-2015	Research Grant from MAFAT—the R&D branch of the Israeli Ministry of Defense, to study future trends in ICT.	\$ 80,000
2012	Research Grant from Katz foundation, to study the effect of Brain Computer Interfaces in teaching cognitive skills.	\$ 30,000
2010-2013	Shaked Foundation granted a year to year grant to organize an annual conference on Futures Studies.	\$ 60,000
2007	Research Grant from MAFAT—the R&D branch of the Israeli Ministry of Defense, to study future control interfaces of unmanned combat vehicles.	\$ 25,000
2007	Research Grant from Keren Shalem—the Israeli Foundation for the retarded children, to develop a Virtual Reality program for enhancing time perception of teenagers with Dawn Syndrome.	\$ 14,000
2004	Research Grant from the Inter University Center for E-Learning (IUCEL) to develop a reliable tool to better assess the quality of academic on-line courses.	\$ 4,000
1994	Research grant from the Israeli Ministry of Education to develop a Taxonomy of Future Cognitive Skills.	\$ 15,000

**COURSES TAUGHT/TEACING EXPERIENCE**

<b>Graduate Course</b>	<b>Title</b>
77-779-01	The effect of Future Technologies on Cognition
77-971-01	Virtual Reality in Training
77-901-01	Theories in Multimedia Interface Design
77-988-01	Future Educational Systems

**MAIN RESEARCH INTERESTS**

1. Educational Futures.
2. Future Technologies and Cognition.
3. Social Systems Theories.
4. Futures' Studies and Methodologies.
5. Multimedia and Virtual Reality Learning User Interface.

## ORGANIZATION OF INTERNATIONAL CONFERENCES

- September 2017, Greece The 10th Pan-Hellenic and International Conference “ICT in Education” (HICICTE). The HICICTE is organized at the University of Ioannina, Greece, by the School of Education and the Department of Computer Science and Engineering.
- June 2007, Boston WG3.1 Secondary Education, WG3.5 Primary Education Informatics, Mathematics and ICT: A golden triangle.
- October 2002, Bar Ilan U AYALA conference on advanced technologies in education.

## ADDITIONAL INFORMATION

- 2015 Member of the search committee for the head of NASA Israel. Ministry of Science, Israel.
- 2015-to Date Head Integration Institute, Bar-Ilan University.
- 2012-to 2014 Chair of the Board, Lookstein Center for Jewish Education, Bar-Ilan University.
- 2010-to Date Senior Fellow, Center for International Communication, Bar-Ilan University.
- 2010-to Date Member at the National Council for Research and Development. Israeli Ministry of Science.
- 2009-to Date Advisor to the National Security Committee. Prime Minister's Office, Israel.
- 2009-to Date Committee member assessing new Graduate Programs in ICT and Ed. The Council for Higher Education, Israel.
- 2001-to Date Director of the Graduate Program in Information and Communication Technology and Education. School of Education, Bar Ilan University. Israel.
- 2003-to 2010 Chair of the Subject Matter Committee on Information Sciences. The Ministry of Education, Israel.
- 2005-to 2007 Chair of the Israeli Steering Committee of SITES2006. The IEA (the [International Association for the Evaluation of Educational Achievement](#)) decided in the late 1990s to start the Second Information Technology in Education Studies ([SITES](#)) consisting of a number of projects or modules. The central theme of SITES is to foster our understanding of how Information and Communication Technologies are affecting the way students learn in schools. In particular, SITES 2006 is the third international comparative study that will help to

understand the way in which teachers and schools of different educational systems are using ICT in teaching and learning.

- 2002-2005 Member of the National Committee for the Gifted Students. The Ministry of Education, Israel.
- 2002-to Date Member of the Subject Matter Committee for the Gifted Students. The Ministry of Education, Israel.
- 2002-to Date Member of the National Committee for Experimental Schools. The Ministry of Education, Israel.
- 2000-to 2002 Member of the National Committee for the teaching of Science and Technology for pre-schoolers. The Weizman Institute of Science. Israel.
- 1995-to Date Member at the board of directors of the Israeli Chapter of the World Future Society.
- 2001-to2002 Member at the organizing committee of AYALA – The National Conference on Education, taking place in Bar Ilan University. October 2002.
- 2000-to Date Member at the GW Forecast of Emerging Technologies Think Tank. A worldwide think tank for tracking the Technology Revolution, facilitated at the School of Business and Public Management at George Washington University in Washington, D.C. [www.techcast.org](http://www.techcast.org)
- 2002-to 2003 Advisor to The Singaporean Ministry of Education on Future Educational Technologies.
- 2001-to 2007 Advisor to The Commissioner for Future Generations. The Knesset—Israeli Parliament.

## **SUPERVISION OF GRADUATE STUDENTS**

### **M.A. Students supervised in the past**

<b>Name</b>	<b>Thesis Title</b>	<b>Grade</b>	<b>Graduating Year</b>
1. Hillik Rave	Measuring the Potential Success in Implementing an Innovative Technological Idea among Tech Innovators	92	2015
1. Ran Lubel	The future impact of the Demographic Dividend on the Israeli educational system.	90	2015
2. Iris Pinto	A Cognitive Model for teaching the skill of managing Information Overload, and improving the solutions' quality of complex problems.	92	2013

3.	Bronic Fibnic	The attitudes of high school science teachers about teaching with 3D technology.	86	2013
4.	Eviatar Moskovitch	The Impact of the use of e-pen for homework submission in science and technology subject matters, on achievements and satisfaction.	90	2012
5.	Jenny Maidel	The impact of reading online on summarizing skills.	90	2011
6.	Ran Stone	The effect of using the web-based applications on the Melioration skill of students in an online course.	90	2011
7.	Timor Miler	The effect of practicing with VR on the ability to solve Conceptual and Perceptual Classical Analogies among Israeli and of Ethiopia origin kindergarten children.	91	2010
8.	Marc Cordon	The future of Jewish Education in South Africa from the point of view of a group of Jewish Educators: An Ethnographic Futures Research.	90	2009
9.	Michal Bezer	Enhancing sequential time perception amongst children with mental retardation through Virtual Reality technology.	94	2007
10.	Tal Tabib	The correlation between students' creative thinking, their achievement and their learning attitude while taking an online a synchronic academic course.	87	2007
11.	Dorit Daum	Usage Patterns of Computer Mediated Communication (CMC) for social support among adolescents.	90	2007
12.	Yael Salomon	Future-images concerning future technologies among Israeli adolescents and their impact on self ambition.	94	2007
13.	Vanina Rosenbaum	The impact of Virtual Reality (VR) on the parents' awareness to cognitive and emotional states of the dyslectic child.	92	2007
14.	Liav Nadler	Structural and Conceptual User Interfaces and their Integrated Effect on Learning with Hypertext	94	2007
15.	Ofer Helez	The didactic efficiency of help files for the users demands.	90	2006
16.	Maly Shavit	The impact of VR on the educator's awareness of cognitive, emotional and social experiences of a dyslectic student.	88	2006
17.	Ronit Moshe	The effect of Virtual Reality on the awareness to pupil's cognitive experience of Test Anxiety among pre-service teaching students.	93	2005
18.	Leeat Karmon	The effect of a Virtual Reality Textual-Visual experience on the teacher's awareness of Test	93	2005



	Anxiety.		
19. Mally Cheled	The impact of Virtual Reality on the awareness of teenagers to the experiences and feelings of immigrant classmates in their first period in Israel.	92	2005
20. Dvorit Bublil	The Effect of Html Programming on the Use Of Mathematical Language Among Middle School Student.	90	2004
21. Chani Kessar	The influence of teacher's questioning in an online course on the cognitive interactions among students.	88	2004
22. Gali Shwartz	The Effect of Peer-To-Peer Technologies on the Quality of a Cooperative Writing Assignment in an Academic Class.	90	2004
23. Rinat Cohen	Metaphors efficiency on Web orientation.	92	2004
24. Asnat Fleishman	The effect of "web based teaching" of Bible and History on students' achievements and positions regarding the subject matter.	80	2004
25. Leah Aharonovitz	The Effect of interacting with 3D self-posture on the body image of handicapped children and adolescents.	86	2003
26. Revital Godart	The Correlation between Frontal & Online Courses and Thinking Styles of Undergraduate Students to their Motivation.	92	2003
27. Lizi Cohen	Developing a computerized learning unit to teach the "Melioration" as a higher order thinking skill among 6 <sup>th</sup> grade students.	94	2003
28. Sigalit Ivry	The Correlation between the personality trait Tolerance for Ambiguity, and would be teachers' willingness to incorporate computers in their future teaching.	90	2003
29. Orna Hayat	Identifying Searching Strategies on Databases by Information Specialists.	89	2002
30. Aviva Sharbat	A Preferred Future Pedagogic Mission for Using Virtual Reality in Schools: An Imen-Delphi Procedure with a World-wide Group of VR Scholars and Developers.	91	1999
31. Sivan Sela	Designing the Roles of the Teacher from the Professional, Pedagogic and Organizational Point of View in the Innovative School "Dror": An Ethnographic Future Research (EFR).	90	1998
32. Sigal Eden	Enhancing Cognitive Skills of Hearing Impaired Children with 3D Rotating Objects in Virtual Reality.	92	1998

33. Merav Gilad	Developing Future Imagery with a Group of Decision Makers from the Israeli Society of Communal Services (ISCS).	88	1998
34. Yehudit Dryer	A Possible Future Mission for Schooling as Developed by an Israeli Group of Educational Leaders.	90	1998
35. Tali Neuman-Pasternak	Improving the Awareness to Toddlers' Initial Cognitive & Emotional Experiences in Kindergarten with Virtual Reality.	86	1998
36. Haya Levine	Gender Differences of Favored Multimedia Learning Interfaces	90	1997

**MA Students being supervised today**

<b>Name</b>	<b>Proposal Title</b>	<b>Approval Year</b>
1. Eti Lencher	Enhancing Mindfulness (MBI) with Brain Computer Interface (BCI).	2016
2. Tamar Weiss	The Impact of the use of a ring-shaped input device ("Ringbow") on users' state of "Flow" on a touch-screen device	2012

**Ph.D. Students supervised in the past**

<b>Name</b>	<b>Thesis Title</b>	<b>Graduating Year</b>
1. Offer Morgenstern	The effect of group size and user-interface on perceived information overload and deliberation outcomes quality in large-scale collaborative deliberation systems.	2016
1. Ganit Eshel-Kedmi	The effect of mediated learning in three-dimensional VR immersive environments on children's cognitive modifiability within dynamic assessment.	2014
2. Hadas Roza-Zada	A Model for Building a Successful Academic Online Course and an Instrument for Examining the Application of the New Pedagogical Strategies in the Virtual Environment of an Academic Online Course.	2011
3. Lizi Cohen	A Tool for Measuring Innovative Technology Ideas among Science Students	2011

4.	Chaya Levin	The Effect of Cultural Background on User Interface Satisfaction in World Wide Web among Israeli Students.	2010
5.	Adva Margaliot	A model for teaching the Melioration Cognitive Skill amongst Pre-service Science Teachers.	2005
6.	Chanoch Hauptman	The Advancement of “Spatial Cognition” in Virtual Environments as a Function of Solid Geometry Learning and Meta-Cognitive Training—While Contents are Designed to Lessen Anxiety and Enhance Learning Motivation.	2005
7.	Sigal Eden	The effect of “Three-Dimensionality” as a representation mode on sequential time perception, on hearing-impaired and hearing children	2004
8.	Alon Hasgal	Knowledge work in Complex and Adaptive Systems in Israel.	2004

#### Ph.D. Students being supervised today

Name	Proposal Title	Approval Year
2. Reut Hochman	The correlation between Fuzzy Logic and Flexible Thinking to the ability in identifying visual patterns in real time and in information-rich environment among Cyber Defender with VR.	2015
3. Yael Tzuri	Developing and validating a new version of the Foresight Styles Assessment tool (FSA)	2015
4. Ran Lubel	Dent’s model for the demographic dividend: The Israeli version.	2015
5. Timor Schwartz	Enhancing predictive semantics with Brain Machine Interface.	2014
6. Iris Pinto	Information overload in VR learning systems.	2014
7. Lior Zoref	Reliability of knowledge in social networks and its impact on crowd wisdom.	2014
8. Hilik Raveh	A tool for measuring the potential success in implementing an innovative technological idea among tech innovators.	2016
9. Orly Rubin	A tool for measuring Futures Thinking of adolescents diagnosed with mild to severe ASD.	2016
10. Israel Naim	A Model for improving the brain wave patterns	2016

of children with ASD with poor performance for functional communication using neurofeedback.

**Post-Doctorate**

<b>Name</b>	<b>Research</b>	
1. Fredy Pachys	Future trends in Informatics and Cryptography.	2013-5
2.		

## LIST OF PUBLICATIONS

## I. UNTIL LAST PROMOTION

**Chapters in Books Prior to Associate Professor**

1. Offir, B., Katz, Y. & Passig, D. (1995). The Utilization of Open Courseware for Developing an Inquiry Approach in the Study of Non-Scientific Subjects. In Wright, J. & Benzie, D. (eds). *Exploring a New Partnership: Children, Teachers, and Technology*. Elsevier Science Publishers, Amsterdam, pp. 97-101.
2. Passig, David (1996). Virtual Literacy: Literacy in Virtual Learning Environments. In Didsbury, H.F. (ed). *Future Vision: Ideas, Insights, and Strategies*. World Future Society. Washington, Maryland, pp. 133-146.
3. Passig, David (1996). An Israeli Model of a Networked Teachers' Training Center for Implementation of Information Technology in Curriculum Development. In Benzie, D. & Katz, Y. (eds). *Information Technology*. IFIP. Laxenburg, Austria, pp. 129-137.
4. Passig, David (1997). A preferred scenario for a future core-curriculum, in Paldi, E. (ed.). *Education in Time Test*, Tel-Aviv University, Ramot Publishing, pp. 53-61 (in Hebrew).
5. Passig, David (1997). A Knowledge Based Model of a Networked Teachers' Training Center for In-Service Training with Information and Communication Technology. In Passey, D. & Samways, B. (eds). *Information Technology: Supporting Change through Teacher Education*. Chapman & Hall, London, UK, pp. 132-138.
6. Passig, David & Levin, Haya (1998). Gender Differences with Multimedia Learning Interfaces. In Shoham, S. & Yitzhaki, M. (eds). *Education for All: Culture Reading and Information*. Ahva Coop. Ramat-Gan, Israel, pp. 145-156.
7. Appelberg, L., Bruillard, E., Downes, T., Katz, Y. O'Brian, T., Offir, B., Passey, D. and Passig, D. (2000). Teacher Education for Distance Learning. In Benzie, D. and Passey, D. (eds) *Educational Uses of Information and Communication Technologies*. Publishing of Electronics Industry with IFIP. Beijing, China. pp. 276-282.
8. Passig, David (2000). Young children and toddlers in the future, in Klein, P. (ed.). *Toddlers, Parents and Caregivers: Studies in Child Development in Israel*. Reches Press Israel, pp. 241-256. (Hebrew).
9. Passig, David (2001). A taxonomy of ICT mediated future thinking skills. In Taylor, H. and Hogenbirk, P. (2001) *Information and Communication Technologies in Education: The School of the Future*. Kluwer Academic Publishers, Boston, pp 103-112.
10. Passig, David & Neuman, Talia (2002). Training Kindergarten Teachers with Virtual Reality. In Watson, Deryn & Andersen, Jane (eds) *Networking The Learner*. Kluwer Academic Publishers, pp. 733-744.
11. Passig, David (2003). Using a Lecturer's Personal Web Site to Enhance the Social Interchange among Students in an Academic Course. In Tom J. van Weert and Robert K. Munro (eds). *Informatics and the Digital Society: Social, Ethical and Cognitive issues*. Kluwer Academic Publishers, pp. 269-276.

**Papers in Refereed Journals/Periodicals Prior to Associate Professor**

1. Offir, B., Katz, Y. & Passig, D. (1994). A Multimedia Alkalmazasa a Kerdezese Tanulasi Technikahoz Valo Adatbank Hasznalataban. *Agria Media*, October, 54-56.
2. Passig, David (1996). Developing Communal Future Jewish Imagery with a Group of Teenagers. *Journal of Jewish Communal Service*. The Journal of the Jewish Communal Service Association, 72(3), 210-216.
3. Passig, David (1997). Imen Delphi: A Delphi Variant Procedure for Emergence. *Human Organization*. Journal of the Society for Applied Anthropology. Southern Methodist University. Dallas, TX. Spring, 56(1), 53-63.
4. Passig, David (1998). An applied Social Systems Procedure for Generating Purposive Sound Futures. *Systems Research and Behavioral Science*. The Official Journal of the International Federation for Systems Research, 15(1), 315-325. Wiley & Sons. England.
5. Passig, David and Levin, Haya (1999). Gender Interest Differences with Multimedia Learning Interfaces among Preschoolers. *Computers in Human Behavior*, 15(2), 173-183. Elsevier Science.
6. Passig, David (1999). Futures' Methodologies as Scientific Tools for the Emergence of Humankind. *World Futures: Journal of General Evolution*. 53(4), 295-307.
7. Passig, David and Eden, Sigal (2000). Improving the Flexible Thinking in Deaf and Hard of Hearing Children with Virtual Reality Technology. *American Annals of the Deaf*, 145(3), 286-291.
8. Passig, David & Eden, Sigal (2000). Enhancing the Induction Skill of Deaf and Hard-of-Hearing Children with Virtual Reality Technology. *Journal of Deaf Studies and Deaf Education*, 5(3), 277-285. Oxford University Press.
9. Passig, David & Sharbat, Aviva (2000). Electronic-Imen-Delphi (EID): An Online Conferencing Procedure. *Education Media International (EMI)*. The official Journal of the International Council for Educational Media (ICEM), 37(1), 58-67. Routledge.
10. Passig, David and Levin, Haya (2000). Gender Preferences for Multimedia Interfaces. *Journal of Computer Assisted Learning*, 16(1), 64-71. Blackwell Science.
11. Passig, David (2000). Teaching Future Jewish Life through a Cross-Generation Future Oriented Curriculum. *Religious Education*. 95(2), 190-214.
12. Passig, David & Sharbat, Aviva (2001). The Why and How VR in Schools: A Preferred Future Pedagogic Mission of VR in Education by a Group of Worldwide Experts in VR & Education. *International Journal of Virtual Reality*. IPI Press, 5(1), 1-11.
13. Passig, D. (2001). Future Online Teachers' Scaffolding: What kind of innovation teachers would like to see on teachers' distance learning Projects? *J. of Technology and Teacher Education (JTATE)*, AACE, 9(4), 599-606.
14. Passig, David & Eden, Sigal (2001). Virtual Reality as a Tool for Improving Spatial Rotation among Deaf and Hard-of-Hearing Children. *CyberPsychology & Behaviour*. 4(6), 681-686.
15. Passig, David (2001). To Study and to Teach the Future. *Journal of Jewish Education*. The American Council for Jewish Education. 66(3), 41-50. (Hebrew)
16. Passig, David, Klein, Pnina & Neuman, Talia (2001). Awareness to Toddlers' Initial Cognitive Experiences with Virtual Reality. *Journal of Computer Assisted Learning*, 17(4), 332-344.

17. Passig, David & Levin, Haya (2001). The Interaction between Gender Age and Multimedia Interfaces Design. *Education & Information Technologies*. The official Journal of the International Federation for Information Processing (IFIP) Technical Committee on Educational, 6(4), 241-250.
18. Passig, David, Neuman, Tali & Eden, Sigal (2002). Improving the Awareness to Toddlers' Initial Emotional Experiences in Kindergarten with Virtual Reality. *Educational Media International*, 39(2), 185-193.
19. Passig, David & Eden, Sigal (2003). Cognitive Intervention, through Virtual Environments, among Deaf and Hard-of-Hearing Children. *European Journal of Special Needs in Education*, 18(2), 173-182.
20. Passig, David (2003). A Taxonomy of future higher thinking skills. *International Journal of Informatics in Education*. The International Journal of the Institute of Mathematics and Informatics, 2(1), 79-92.
21. Passig, David (2004). Future Time Span as a Cognitive Skill in Futures Studies. *Futures Research Quarterly*, 19(4), 27-47.
22. Passig, David (2004). Variations to the Imen-Delphi Procedure aimed at helping in the emergence of communities of interests. *Journal of Organizational Transformation & Social Change*, 1(2-3), 95-109.
23. Passig, David & Sharbat, Aviva (2004). The Imen-Delphi procedure in practice. *Systems Research & Behavioral Science*. The Official Journal of the International Federation for Systems Research. Wiley & Sons. England, 21(2), 187-191.
24. Passig, David and Hasgal, Alon (2004). Decentralization and Integration: Two Contrasting Vectors Which Promise Efficient Knowledge Management in Complex Organizations. *General Systems Bulletin*, 33, 15-20.
25. Passig, David (2006). Melioration as a newer category in Bloom's taxonomy. *Theory into Practice in Curriculum Planning*. The Journal of the Ministry of Education Pedagogical Secretariat, Jerusalem, 18(1), 31-52 (Hebrew).
26. Passig, D. & Cohen, L. (2006). Innovative Combinations: A Tool for Measuring the Melioration Skill. *Teachers College Record*. Research Note. Date Published: October 09, 2006 [www.tcrecord.org](http://www.tcrecord.org) ID Number: 12776.

## II. SINCE LAST PROMOTION

### Chapters in Books

1. Passig, D. (2014). The future of nationhood in Israel. In Fania Oz-Salzberger and Yedidia Stern (eds). *The Israeli Nation State: Political, Constitutional and Cultural Challenges*. Boston: Academic Studies Press. 342-366.
  - a) Passig, D. (2017). Future Israelische Nationalstaat. Fania Oz-Salzberger und Yedidia Z. Stern (Hrsg.) *Der Israelische Nationalstaat: Politische, verfassungsrechtliche und kulturelle Herausforderungen*. Aus dem Englischen von Clemens Heni und Michael Kreutz. The Berlin International Center for the Study of Antisemitism (BICSA).

### Papers in Refereed Journals/Periodicals

1. Passig, David (2007). Melioration as a higher thinking skill to enhance intelligence. *Teachers College Record*. Columbia University, 109(1), 24–50.
2. Eden, S. and Passig, D. (2007). Three-Dimensionality as an effective mode of Representation for Expressing Sequential Time Perception. *Journal of Educational Computing Research*, 36(1), 51-63.
3. Passig, D. & Schwartz, G. (2007) Collaborative writing: Online vs. frontal. *International Journal on E-Learning*, 6(3), 395-412.
4. Passig, D., Eden, S. and Heled, M. (2007). The impact of Virtual Reality on the awareness of teenagers to social and emotional experiences of immigrant classmates. *Education and Information Technologies*, 12, 267-280.
5. Passig, D. & Moshe, R. (2008). Enhancing pre-service teachers' awareness to pupils' test-anxiety with 3D immersive simulation. *Journal of Educational Computing Research*, 38(3), 355-378.
6. Passig, D. Eden, Sigal & Rosebaum, V. (2008). The Impact of Virtual Reality on Parents' Awareness of Cognitive Perceptions of a Dyslectic Child. *Education and Information Technologies*, 13(4), 329-344.
7. Passig, D. (2009). Improving the sequential time perception of teenagers with mild to moderate mental retardation with 3D Immersive Virtual Reality (IVR). *Journal of Educational Computing Research*, 40(3), 263-280.
8. Passig, D. (2009). The future of VR in education: A future oriented meta-analysis of the literature. *Themes in Science and Technology Education*, Special Issue on Virtual Reality in Education, 2(1-2), 269-293. (Special Issue).
9. Passig, D. & Nadler, L. (2010). Structural and conceptual user interfaces and their impact on learning. *Education and Information Technologies*, 15(1), 51-66.
10. Passig, D. and Eden, S. (2010). Enhancing time-connectives with 3D Immersive Virtual Reality (IVR). *Journal of Educational Computing Research*, 42(3), 307-325.
11. Passig, D. (2011). The impact of Virtual Reality on educators' awareness of the cognitive experiences of a dyslectic student. *Teachers College Record*, 113(1), 181-204.
12. Passig, D. (2014). Usage patterns of communication interfaces for social support among at-risk adolescents. *Education and Information Technologies*, 19(4), 781-804.
13. Passig, D. & Gerstenhaber, M. (2014). A possible pension-savings paradigm for a sustainable future: A developed country case study (UK). *Journal of Organisational Transformation & Social Change*, 11(3), 207-229.
14. Passig, D. & Miler, T. (2014). Solving conceptual and perceptual analogies with Virtual Reality among kindergarten children of emigrant families. *Teachers College Record*, 116(2). Online first February 2014:  
[www.tcrecord.org/library/Abstract.asp?ContentId=17339](http://www.tcrecord.org/library/Abstract.asp?ContentId=17339)
15. Passig, D. & Cohen, L. (2014). Measuring the style of innovative thinking amongst engineering students. *Research in Science & Technological Education*, 32(1), 56-77.  
[www.tandfonline.com/eprint/bMrwY7mIA9ydfiRpMtHr/full](http://www.tandfonline.com/eprint/bMrwY7mIA9ydfiRpMtHr/full)
16. Passig, D. (2015). Revisiting the Flynn Effect through 3D Immersive Virtual Reality (IVR). *Computers and Education*. 88(10), 327-342.  
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17. Passig, D., Cohen, N., Bareket, L. & Morgenstern, O. (2015). Crowd-deliberation as an organizational problem solving tool. *International Journal of Manpower*, 36(7), 1124 - 1143. <http://dx.doi.org/10.1108/IJM-03-2014-0075>
18. Passig, D. & Maidel-Kravetsky, J. (2016). The impact of collaborative online reading on summarizing skills. *Education and Information Technologies*, 21(3), 531-543. <http://link.springer.com/article/10.1007/s10639-014-9337-5>
19. Passig, D., Tzuriel, D. & Eshel-Kedmi, G. (2016). Ameliorating children's cognitive modifiability through mediated learning and Dynamic Assessment with 3D Immersive VR environments. *Computers and Education*, 95(4), 296-308. <http://www.sciencedirect.com/science/article/pii/S036013151630015X>

### Papers in Revisions

20. Passig, D. (2017). The Educational and Neuropsychological aspects of Futures Thinking Skill: An initial overview of an emerging field.
21. Tzuriel, D., Eshel-Kedmi, G. & Passig, D. (2017). The effects of unique spatial characteristics of 3D-IVR and 2D computerized environments on cognitive modifiability.

### Papers in Refereed Journals submitted for Publication

1. Passig, D. & Morgenstern, O. The effect of group size and user-interface on perceived information overload and deliberation outcomes quality in large-scale collaborative deliberation systems.
2. Passig, D. & Zoref, L. Reliability of knowledge in social networks and its impact on crowd wisdom.

### Published Books

1. Passig, David (2008). *The Future Code*. Tel-Aviv: Yediot Press. 542 pages in *Hebrew*. (24 weeks in best-seller list. Received Gold Award in 2010).
2. Passig, David (2010). *2048*. Tel-Aviv: Yediot Press. 354 pages in *Hebrew*. (15 weeks in best-seller list. Received Gold Award in 2011).
  - a. Passig, David (2011). *Iki Bin Elli*. Istanbul: Coton Kitap Publication. 387 pages in **Turkish**. (10 weeks in best seller list).
  - b. Passig, David (2013). *2048*. Tel-Aviv: Yediot Press. 427 pages in **English**.
3. Passig, David (2013). *Forcognito—the Future Mind*. Tel-Aviv: Yediot Press. 325 pages in *Hebrew*. (10 weeks at the top of the best seller list).

### Book in Preparation

4. Passig, David (2016). *Concealed Future: Supersymmetry in Past Present and Future*.

**PAPERS PRESENTED AT SCIENTIFIC CONFERENCES**

1. April 2016 Key note speaker at the 1<sup>st</sup> Israeli Conference on the Science and Technology of Virtual and Augmented Reality (ISVAR). School of Communications at IDC Herzliya on the topic: Enhancing IQ with VR.
2. December 2015 key note speaker at the 2015 Innovation Futures Roundtable, New Providence, the Bahamas on the topic: Future frontiers in science and technology and their R&D and educational challenges.
3. October 2015 key note speaker at the international conference of the [Belmonte Science Laboratories Center](#), dedicated to the challenges facing science education in the near future and the means to address these challenges, hosted by the Hebrew University of Jerusalem on the topic: Art and craft of science education: Challenges in an ever-changing world, Israel.
4. July 2015 key note speaker at the 15<sup>th</sup> edition of Les Rencontre Economic d'Aix-en-Provence, France [www.lecercledeconomistes.asso.fr](http://www.lecercledeconomistes.asso.fr) on the topic: What social disruptions are in store for the 21<sup>st</sup> century?
5. April 2015 key note speaker at The Asian Conference on Technology in the Classroom 2015 (ACTC2015), Kobe, Japan on the topic: Ameliorating children's cognitive modifiability through mediated learning and Dynamic Assessment with VR.
6. March 2015 key note speaker at IfBookThen, the international conference about the future of storytelling in Milan (Italy), [www.ifbookthen.com](http://www.ifbookthen.com) on the topic: Enhancing Cognitive skills with Immersive Virtual Reality.
7. July 2014 presented paper on "Improving children's cognitive modifiability through mediated learning and Dynamic Assessment within 3D Immersive Virtual Reality environment" at the KEYCIT - Key Competencies in Informatics and ICT, July 1-4, 2014 in Potsdam, Germany.
8. May 2013 key note speaker at the 9<sup>th</sup> International Beauty through Science (BTS) conference, Stockholm, Sweden, on the Topic: Mega Trends in Science and Technology: The human mind factor.
9. April 2013 key note speaker at the SPACE conference (European Network for Business Studies and Languages) in Baden-Württemberg State University Karlsruhe, Germany on the Topic: EU Citizens - Educational Challenges and Opportunities.
10. April 2012 key note speaker at the MOSTA Conference in Vilnius on the topic: Future Sciences and their impact on Higher Education. Vilnius University.
11. July 2011 conducted a symposium at the IACEP conference in Boston on the topic: *Is the medium still the message? The effects of new media on learning and thinking.* Presented also 2 papers: a) The Effect of Practicing with VR Technology on the Ability to Solve Conceptual and Perceptual Analogies among Kindergarten Children, and b) Dynamic Assessment in Computerized 3D Virtual Reality Environment: Effects on Cognitive Modifiability.
12. April 2011 presented paper on "The future of Israeli nationhood" at the International Academic Colloquium on the topic: The Israeli Nation State: Political, Constitutional and Cultural Challenges, hosted by the Leon Liberman Chair in Modern Israel Studies, Australian Centre for Jewish Civilization. Monash University.
13. June 2010 presented paper on "Enhancing time-connectives with 3D Immersive Virtual Reality" at the IFIP WG 3.5 27-30 June, 2010 in Amiens, France.

14. February 2009 presented a keynote paper at the closing session of the annual conference of The Israeli Association for Program Evaluation titled: "The pace of scientific change and its impact on future scientific methods." Feb. 18-19 Bar Ilan University, Israel.
15. September 2008 presented paper on "Future Challenges to the Role of a Conservative Rabbi in the US" at the international conference on Promoting Jewish Literacy in Educational Settings Sept. 21-24 University of Maryland, Washington DC.
16. June 2008 presented paper on "The Impact of Virtual Reality on Parents' Awareness of Cognitive Perceptions of a Dyslexic Child" at the IFIP WG 3.5. 22-27 June, 2008. Prague.
17. June 2007 presented paper on "Advancing Spatial Thinking with Virtual Reality and Metacognitive Self-Regulation" at the IFIP WG 3.5 Informatics, Mathematics, and ICT: a golden triangle. 27-29 June, 2007. Boston, USA.
18. March 2007 presented a paper on "Three-Dimensionality as an effective mode of Representation for Expressing Sequential Time Perception" The CHAIS Conference on Communication Technology and Education. Open University, Tel Aviv.
19. June 2006 presented a paper on "Future Time Span as a Cognitive Skill in Education" at the UNESCO conference on Education for the Third Millennium, Bangalore, India.
20. March 2006 presented a paper on "Innovative Combinations' Test: A Tool for Measuring the Melioration Skill" The CHAIS Conference on Communication Technology and Education. Open University, Tel Aviv. pp 114-123
21. December 2005 presented a paper on "Enhancing Cognitive Skills with Virtual Reality. 15th International Conference on Artificial Reality and Tele-existence. University of Canterbury, Christchurch, New Zealand.
22. October 2004 presented a paper on "Melioration and Synthesis." AYALA15. The Israeli annual conference on Education. Ben-Gurion University, Israel.
23. July 2004 presented a paper on "Three-Dimensionality as a representation mode to better express Sequential-Time perception for children." IFIP WG 3.5- Learning for 21st century: What really matters? 28 June - 2 July 2004. Budapest, Hungary. Proceedings pp 92-94.
24. July 2003 presented a paper on "Variations to Imen-Delphi Procedure." The 47<sup>th</sup> Annual Meeting of the International Society for the System Sciences. July 7-11, 2003, Heraklion, Crete, Greece. Proceedings pp 81-89.
25. January 2003 presented paper on "A Model of Teaching the Melioration skill to pre-service science teachers." IFIP 3.1 " ICT and The Teacher of The Future. University of Melbourne, Australia. Published in a special volume of the: *Conferences in Research and Practice in IT*. Vol 23 pp 93-97. Published by the Australian Computer Society.
26. November 2002. Presented a paper on "The future of the future of home technologies." The Annual conference of the Israeli Association for Information Technologies. Tel Aviv.
27. October 2002. Presented paper on "A model for training the Melioration skill with ICT". AYALA13. The Israeli annual conference on Education. Bar Ilan University, Israel. Proceedings pp 19-22.

28. July 2002. Presented paper on "Using a Lecturer's Personal Web Site to Enhance the Social Interchange among Students in an Academic Course". IFIP 3.5 "Social, Ethical and Cognitive Issues of Informatics and ICT - SECIII" University of Dortmund Germany, Proceedings pp 80.
29. July 2001. Presented paper on "Training Kindergarten Teachers with Virtual Reality." WCCE 2001 7<sup>th</sup> IFIP World Conference on Computers in Education, Copenhagen. Proceedings pp. 83
30. July 2001. Participated on panel about "US perspective of National Educational Technology Standards (NETS) for students and teachers and a broader international perspective." WCCE 2001 7<sup>th</sup> IFIP World Conference on Computers in Education, Copenhagen. Proceedings p. 259
31. July 2001. Participated on panel about "Integrating Technology into the curriculum: Local outcomes of a national agenda." WCCE 2001 7<sup>th</sup> IFIP World Conference on Computers in Education, Copenhagen. Proceedings pp. 258
32. July 2001. Participated on panel about "Provoking new images of research and Practice in reformed educational spaces." WCCE 2001 7<sup>th</sup> IFIP World Conference on Computers in Education, Copenhagen. Proceedings pp. 250
33. May 2001. Presented a paper on "Virtual Reality as a Tool for Improving Spatial Rotation among Deaf and Hard-of-Hearing Children." TET 2001, Prague. Proceedings pp. 202-206
34. November 2000. Presented a paper on "Improving the Awareness to Toddlers' Initial Emotional Experiences in Kindergarten with Virtual Reality" ICEM, Geneva.
35. September 2000. Presented a paper on "Enhancing cognitive skills with Virtual Reality". ICDVRAT 2000 Sardinia, Italy
36. August 2000. Participated on a symposium on "Distance Learning". IFIP 2000, Beijing, China.
37. August 2000. Presented a paper on "Future Online Teachers' Scaffolding: What sort of advanced technological innovations teachers would like to see on future distance training projects? IFIP 2000, Beijing, China.
38. April 2000. Presented a paper on "Future Taxonomy of Cognitive Skills". Chile 2000, The Bookmark of the School of the Future. Chile, Vina del Mar. pp. 152-160.
39. June 1998. Presented a paper on "Gender Differences of Favored Multimedia Learning Interfaces". Ed-Media. ACM. Freiburg, Germany. (521-528).
40. July 1998. Presented a paper on "Gender Differences in Learning Interest Among Preschoolers as Derived from Multimedia Interface Design". The International Association of School Librarianship. 27th Annual Conference. Ramat-Gan, Israel.
41. October 1997. Presented a paper on "An Applied Social Systems Procedure for Emergence". In Rhee, Yong Pil and Bailey, Kenneth D. (eds.) (1997). *Systems Thinking, Globalization of Knowledge and Communication Ethics*. 41st International meeting of the International Society for the Systems Sciences (ISSS). Korea, pp. 403-421.
42. June 1995. Presented a paper on "An Open and Integrated Learning Approach with Multimedia". Ed-Media 94, Vancouver, Canada.
43. February 1995. Presented a paper on "Multimedia Language: Theoretical Foundations for Design of Effective Learning Interfaces". AYALA, Jerusalem.

44. December 1994. Presented a paper on “Multimedia Effective Interfaces”. At the IEEE Israeli Chapter. Tel-Aviv.
45. June 1993. Presented a paper on “Virtual Reality in Education, and Learning Virtually”. At the World Association for Educational Research (WAER) 11th International Congress, Jerusalem.
46. February 1992. Presented a paper on “Future Possible Role for Israel in American Jewish Identity”. At the 13th Annual Conference of the Minnesota Jewish Educators, Minneapolis.
47. October 1987. Presented a paper “Futurizing educational Software”. At the Annual Conference of the World Future Society. Boston.

## ACADEMIC PROFILE

David Passig, Ph.D.

My research addresses two main academic venues that combine my expertise on advanced educational technologies and education. In the first venue, I study the impact of advanced interfaces of Information and Communication Technologies (ICT) on cognitive and learning skills. In this venue, my interest is focused on two technologies: 3D Immersive Virtual Reality (3D IVR) and Brain Computer Interface (BCI). In the second venue, my interest is to identify and measure learning skills of a higher order.

In the **first venue**, my studies indicate that 3D IVR, as compared with a variety of other interfaces and modes of expression, can significantly improve a variety of thinking and cognitive skills such as inductions and deductions (Passig & Eden, 2000), time connectives (Passig & Eden, 2010) and conceptual and perceptual analogies (Passig & Miler, 2014). This venue addresses a dilemma that has been debated around the Flynn Effect phenomenon, which identified the overwhelming improvement in IQ scores that took place during the second half of the 20<sup>th</sup> century. After many attempts to explain the phenomenon, it is now widely accepted that nurture plays a major role in accelerating humanity's cognitive skills. My research venue attempts to revisit these explanations. In my studies I have tested a few aspects of Flynn's social and cultural explanations. I examined, first, whether it is possible to generate an even greater acceleration in the enhancement of various abstract thinking skills (Passig, Klein & Neuman, 2001; Passig & Moshe, 2008). I asked whether it is possible to improve skills even among populations with congenital cognitive disabilities (Passig & Eden, 2003; Passig, 2009), and what is the most efficient way to accelerate that improvement. And most importantly—I examined whether it is possible to improve concrete thinking skills as well (Passig, Tzuriel & Eshel Kedmi, 2016), which Flynn found not to have improved. The results of these studies cast solid doubt on Flynn's explanations, suggesting that advanced educational technologies, with their advanced interfaces, indeed generate an accelerated enhancement in a wide range of skills that the natural environment alone cannot account for.

I have published a meta-analysis of the studies that I have conducted since my last promotion (Passig, 2015). The meta-analysis describes three tiers of experiments that were conducted in the course of the last decade. The first tier included experiments that tested the hypothesis that there is a clear-cut benefit to using 3D IVR for learning concepts that could only be taught in the past through verbal means. The initial goal was simply to see whether advanced technologies could significantly accelerate learning processes (Passig, Eden & Heled, 2007;

Passig, 2011). The second tier included a group of experiments in which we examined whether it was possible to improve not only the level of awareness and sensitivity to the "other" with the help of 3D IVR, but also whether it was possible to improve cognitive skills that can be measured through standard intelligence tests (Passig & Miler, 2014). The third tier included a few experiments in which we examined whether it is possible to improve cognitive skills even for those with lesser genetic potential (Passig, 2009).

Currently, I am engaged in testing Brain Computer Interface (BCI) to further strengthen these findings with another advanced interface and in order to verify other ways to improve thinking and learning skills. I hope in due time to be able to report the results of these efforts.

In the **second venue**, my research into cognitive skills brought me to revisit the taxonomy of cognitive and learning skills that Bloom and his colleagues developed during the fifties (Passig, 2003). I assumed that the graduates of today's schooling will need a different set of cognitive and learning skills reflecting the profound change that they will encounter. In this venue I have been tracing the characteristics of advanced societies and proposed a relevant taxonomy of cognitive skills that will provide our students with appropriate tools to succeed in their adulthood. I have used Bloom's taxonomy as a spring board and expanded his categories to reflect the anticipated needs of the learner (Passig, 2006). Based on extensive literature reviews, I have suggested an additional cognitive category to add to our teaching procedures that I named *melioration*, and which I believe, is not addressed in today's curriculum (Passig, 2007).

This skill is becoming increasingly important. I have defined it as follows: The capability of selecting the appropriate amalgam of information and applying it to a solution of problems in situations, which arise at different times and places, thereby meliorating the amalgam. I have distinguished between two different kinds of *melioration*. The two kinds of meliorating an idea are the melioration of information, concepts, ideas, and insights, and the melioration of tools and technologies. I found six stages in the meliorating of information: *original intention*, *occasionally retrospective intention*, *process*, *result*, *evaluation*, and *continuity*. Based on this definition, which is clearly distinguished from any other known in the literature definition of creativity or the initial Bloom's categories, we have engaged in developing and validating a tool for measuring it (Passig & Cohen, 2006) as well as teaching it (Stone, 2014).

During the last decade, I have had the privilege to supervise 50 master and PhD candidates on a variety of studies, all of whom contributed to the field of 3D IVR in education and advanced

learning skills, who graduated successfully (3 of them are still working on their Master's thesis and 6 on their PhD thesis) . One of my PhD students has joined our department's staff in a tenure track and some others have joined successfully other academic institutes. Currently, 2 post docs are working with me in two large studies. One is working on analyzing trends in ICT as part of a grant from the Israeli Ministry of Defense. Another is working on developing a tailored BCI headset for testing cognitive biofeedback as part of a grant from the Katz foundation.

Since my last promotion, I have received five research grants for studying 3D IVR in education. I have also received 3 prizes: one called “*First Step to Nobel Prize in Physics,*” which is an International Competition for High School Students in Research Projects in Physics from the Institute of Physics at the Polish Academy of Sciences, for developing a Brain Computer Interface with a group of high school students who worked in my lab, with which a handicap could drive a wheel chair with his/her EEG brain waves. The other 2 prizes are called “*The Bernovsky Award for Excellence in Early Childhood Education*” from Haifa University. Once for the study titled: “Solving conceptual and perceptual analogies with Virtual Reality among kindergarten children of emigrant families.” This study has just been published in *Teacher College Record* (Passig, 2014). And a second time for the study titled: “Ameliorating children's cognitive modifiability through mediated learning and Dynamic Assessment with 3D Immersive VR environments.” This study has been published in *Computers and Education* (2016).

Since my last promotion I have served as a referee in a few refereed journals; among them the *Journal of Educational Computing Research* (JECR), the *Teachers College Record* (TCR), and the *Journal of Education and Information Technologies* (JEIT). I also served as a guest editor at the *Journal for Cognitive Education and Psychology* (JCEP). Co-editing a special issue on: Cognition and Technology: Theory, Research and Practice (2014).

In the last decade I served as the head of the Graduate Program in ICT and Education at the school of Education in Bar-Ilan University. For five years I served as the advisor to the Commissioner for Future Generations at the Israeli Parliament, and as the chair of the Subject Matter Committee on Information Sciences at the Israeli Ministry of Education. I served in 2007 as the chair of the Israeli Steering Committee of *SITES 2006*. As part of the International Association for the Evaluation of Educational Achievement, the Second Information Technology in Education Studies' (SITES) theme was to foster our understanding of how



Information and Communication Technologies are affecting the way students learn in schools. In particular, *SITES 2006* was the third international comparative study that helped understand the way in which teachers and schools of different educational backgrounds are using ICT in teaching and learning. I also served in national and international evaluation committees – in the Israeli Ministry of Science and in the European FP7.

Currently I serve as the chair of the Integration Center at Bar-Ilan University, as a member of the National Committee for the Gifted Students, as a member of the National Committee for Experimental Schools, and as a member at the National Council for Research and Development in the Israeli Ministry of Science.

Since my last promotion, I have published 3 non-referred books. One titled: *The Future Code* (2008 in Hebrew), in which I introduce the reader to the rational and a variety of methodologies with which one could study social and educational trends. In this book I have developed 16 trends to demonstrate the mega-trends that are working to shape the 21<sup>st</sup> century. This book has been listed in the Israeli best seller list for 24 weeks and received the Gold Book Award in 2010.

A second book titled: *2048* (2010 in Hebrew), introduced the reader to a *universal force theory* with which I have analyzed the driving force in history in order to assess mega-trends in sciences and technologies that could develop in the coming decades and the way these might impact societies. This book has been listed in the best seller list for 15 weeks and received the Gold Book Award in 2011. This book was translated to **Turkish** in 2011 and was listed in the Turkish best seller list for 10 weeks. Recently it was published in **English** too (2013).

My third book titled: *Forcognito – The Future Mind* (2013 in Hebrew), examines the neurology of futures' thinking and elaborates on the trends of future intelligence. This book has been listed in the best seller list for 10 weeks.