

MISOOK HEO, PH.D.

EDUCATION

Ph.D. Information Science. University of Pittsburgh. Dissertation: <i>Web visualization techniques and user mental models</i>	2000
M.S. Information Science. University of Pittsburgh.	1994
M.S. Information Studies. Yonsei University (Seoul, Korea). Thesis: <i>A study on automatic indexing using knowledge base</i>	1992
B.S. Information Studies. Yonsei University (Seoul, Korea).	1989

PROFESSIONAL APPOINTMENTS

Director , Doctoral Program in Instructional Technology and Leadership, School of Education, Duquesne University.	July 2015 - present
Professor	July 2016 – Present
Associate Professor	July 2011 – June 2016
Assistant Professor Department of Instruction and Leadership in Education School of Education, Duquesne University.	July 2005 – June 2011
Assistant Professor , College of Information Studies Florida State University.	August 2000 – May 2005

GRANTS AND AWARDS

EXTERNAL AWARD AND GRANTS

<u>Fulbright Scholar Award</u> . <i>Documenting localities in a digital environment: Social and cultural perspectives of participatory archives in S. Korea</i>	2014
<u>National Research Foundation of Korea (NRF)</u> . Co-PI. <i>Social changes and localities: Revival of life-world and memory.</i> (approximately \$684,000 at the time of award)	2013-2016
<u>National Research Foundation of Korea (NRF)</u> . Co-PI. <i>Documenting Strategies for local memory.</i> (approximately \$290,000 at the time of award)	2010-2013
<u>American Association of University Women (AAUW)</u> . Co-PI. <i>From computer literacy to computer science: Increasing gender equity in the science of computers.</i> (\$7,000)	2006-2007

EXTERNAL FUNDING

<u>Leach Fund</u> . Co-PI. <i>Promoting and supporting pre-college and undergraduate female scientists.</i> (\$9,000)	2017-2018
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AT & T Corporation. Co-PI. *Digital storytelling for underserved students*. 2008-2009
(\$20,000)

INTERNAL FUNDING

Duquesne University

- *Visuals, multimedia, and learner characteristics in online learning: Systematic design to enhance learner motivation*. PI. (\$8,521) 2017-2019
- *Relationship-based social awareness information disclosure*. PI. (\$9,999) 2008-2010
- *Visualization of learner knowledge sharing: Enhancing online motivation*. Co-PI. (\$3,829) 2013-2014
- *Personalized and multimedia-based, exact-spot assessment*. PI. (\$1,990) 2012-2013
- *Fostering creation of technology-intensive online pedagogical resources*. PI. (\$1,500) 2011-2012
- *Exploring the quality of online mathematics instructional programs*. PI. (\$3,000) 2011-2012

SCHOLARLY PUBLICATIONS

JOURNAL PUBLICATIONS

- Heo, M., & Song, J.-S. (2018). *Knowledge sharing willingness and contribution persistence: The impact of self-awareness information*. Manuscript submitted for publication
- Toomey, N., & Heo, M. (2018). *Resource Use Behavior as Evidence for the Verbalizer, Object Visualizer, Spatial Visualizer Paradigm*. Manuscript submitted for publication.
- Heo, M., & Song, J.-S. (2018). *An empirical study of social intelligence measure invariance among knowledge workers*. Manuscript submitted for publication
- Heo, M., & Toomey, N. (2016). Supporting sustained willingness to share knowledge with visual feedback. *Computers in Human Behavior*, 54(1), 388-396. doi:10.1016/j.chb.2015.08.034
- Schreiber, J. B., & Heo, M. (2016). Teaching large scale data analysis. In M.C. Smith and N. DeFrates-Densch, *Challenges and Innovations in Educational Psychology Teaching and Learning*. Charlotte, NC: IAP.
- Heo, M., & Toomey, N. (2015). Motivating continued knowledge sharing in crowdsourcing: The impact of different types of visual feedback. *Online Information Review*, 39(6), 795-811. doi:10.1108/OIR-01-2015-0038

- Heo, M., & Toomey, N.** (2015). User needs of cultural portals: A study of model invariance within the Korean population. *Journal of Information Development*. Advance online publication, 32(3), 688-700. doi:10.1177/0266666914568393
- Doring, A., Zarecky, A., & **Heo, M.** (2014). *Online learners and their self-disclosure preference*. *Journal of Information Technology Education: Research*, 13, 163-175. Retrieved from <http://www.informingscience.org/Journals/JITERResearch>
- Heo, M., & Song, J-S., & Seol, M-W.** (2013). User needs of digital service Web portals: A case study. *Journal of Educational Research*, 106(6), 469-477. doi:10.1080/00220671.2013.836882
- Heo, M.** (2013). *Assessing user needs of Web portals: A measurement model*. *Information Research*, 18(2), paper 578. Retrieved from <http://InformationR.net>
- Heo, M.** (2013). User satisfaction with portals: Testing for factorial validity and invariance across age groups. *Online Information Review*, 37(5), 804-820. doi:10.1108/OIR-06-2012-0099
- Phelps, D. C., Gathegi, J. N., Workman, M., & **Heo, M.** (2012). Information system security: Self-efficacy and implementation effectiveness. *Journal of Information System Security*, 8(1), article 1. Retrieved from <http://www.jissec.org>
- Heo, M., Stoffa, R., & Kush, J.** (2012). Factor analysis of the ESL/EFL strategy inventory for language learning used by generation 1.5 Korean immigrant college students. *Language, Culture and Curriculum*, 25(3), 231-247. doi:10.1080/07908318.2012.706302
- Koch, A., **Heo, M., & Kush, J.** (2012). Technology integration into preservice teacher training. *International Journal of Information and Communication Technology Education*, 8(1), 1-14. doi:10.4018/jicte.2012010101
- Heo, M.** (2011). Communication privacy disclosure management: An empirical study of socialization support in a pseudo-online course. *Journal of Interactive Online Learning*, 10(2), 76-95. Retrieved from <http://www.ncolr.org/jiol>
- Heo, M.** (2011). Improving technology competency and disposition of beginning pre-service teachers with digital storytelling. *Journal of Educational Multimedia and Hypermedia*, 20, 61-81. Retrieved from <http://www.editlib.org/j/JEMH/>
- Heo, M.** (2011). A proposal of a quality model for cultural heritage archive portals. *Journal of Korean Society of Archives and Records Management*, 11(1). Retrieved from <http://scholar.ndsl.kr/schDetail.do?cn=JAKO201117443315281#>
- Stoffa, R., Kush, J., & **Heo, M.** (2011). Using the motivated strategies for learning questionnaire (MSLQ) and the strategy inventory for language learning (SILL) in assessing motivation and learning strategies of generation 1.5 Korean immigrant students. *Education Research International*, Article ID 491276. doi:10.1155/2011/491276

- Heo, M., & Myrick, L. M.** (2011). Girls and computers – Yes we can: A case study on improving female computer confidence and decreasing gender inequity in Computer Science with an informal, female learning community. In L. A. Tomei. (Eds.), *Online Courses and ICT in Education: Emerging Practices and Applications*. Hershey, PA: IGI Global.
- Heo, M.** (2009). Design considerations for today's online learners: A study of personalized, relationship-based social awareness information. *International journal on E-Learning*, 8, 293-311. Retrieved from <http://www.editlib.org/j/IJEL/>
- Heo, M.** (2009). Digital storytelling: An empirical study of the impact of digital storytelling on pre-service teachers' self-efficacy and dispositions towards educational technology. *Journal of Educational Multimedia and Hypermedia*, 18, 405-428. Retrieved from <http://www.editlib.org/j/JEMH/>
- Heo, M., & Myrick, L. M.** (2009). Girls' computing club: Making changes of gender inequity in CS with informal, female learning community. *International Journal of Information and Communication Technology Education*, 5(4), 44-56. doi:10.4018/jicte.2009041005
- Heo, M.** (2006). Digital natives and library: Potential of podcasting. *National Assembly Library Review*. 43(7), 53-63.
- Heo, M., & Chow, A.** (2005). The impact of computer augmented online learning and assessment tool. *Journal of Educational Technology & Society*, 8, 113-125. Retrieved from <http://www.ifets.info>
- Heo, M., & Hirtle, S. C.** (2001). An empirical comparison of visualization tools to assist information retrieval on the Web. *The Journal of the American Society for Information Science and Technology*, 52, 666-675. doi: 10.1002/asi.1117

SCHOLARLY PUBLICATIONS – PROCEEDINGS

- Heo, M.** (2018). *Social comparison and motivation: Experience of being the best versus being one of the better ones*. Manuscript submitted for presentation.
- Song, J-S., Seol, M-W., & Heo, M.** (2012). Documenting locality in a digital environment: Experiments and tasks. *Proceedings of the International Council on Archives Congress, Brisbane, Australia*. Retrieved from <http://ica2012.ica.org/program/full-papers.html>
- Zarecky, A., Doring, A., & Heo, M.** (2012). The online learning environment: Building a social and collaborative community. In T. Amiel & B. Wilson (Eds.), *Proceedings of World Conference on Educational Media and Technology 2012* (pp. 1048-1053). Association for the Advancement of Computing in Education (AACE).
- Lucey, K., & Heo, M.** (2011). Educational Web portals: Moving forward to Web 2.0 and M-learning. In M. Koehler & P. Mishra (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2011* (pp. 3080-3086). Chesapeake, VA: Association for the Advancement of Computing in

Education (AACE).

- Koch, A., **Heo, M.**, Kush, J., & Carbonara, D. (2009). Active learning with digital media: The use of podcasting in reflective learning for elementary social studies instruction. In F. Salajan (Ed.), *Proceedings of 4th International Conference on e-Learning* (pp. 255-260). Reading, UK: Academic Publishing Limited.
- Heo, M.**, & Yi, M. (2008). An empirical study of the learning effect of an ontology driven information system. *Proceedings of the 19th conference on Hypertext and Hypermedia, New York, NY*, 225-226. doi: 10.1145/1379092.1379137
- Heo, M.** (2008). Digital storytelling: A gateway to educational technology in a teacher education program. *Proceedings of the International Conference on Interactive Computer Aided Learning, Villach, Austria*. Retrieved from http://www.icl-conference.org/dl/proceedings/2008/finalpaper/Contribution302_a.pdf
- Heo, M.**, & Myrick, L. M. (2007). Coping with gender inequity in computing: Using WIKIs to foster female interest in CS. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2007* (pp. 731-736), Chesapeake, VA: AACE.
- Heo, M.** (2006a). Relationship-based social awareness disclosure. *Proceedings of the 6th IEEE International Conference on Advanced Learning Technologies* (pp. 852-853), Kerkrade, The Netherlands. doi:10.1109/ICALT.2006.1652576
- Heo, M.** (2006b). Are you my buddy? Social awareness and information sensitivity in online education. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2006* (pp. 383-388), Chesapeake, VA: AACE.
- Heo, M.** (2005). Social information visualization in online learning. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2005* (pp. 2240-2245), Chesapeake, VA: AACE.
- Heo, M.** (2004). Activity awareness in asynchronous communication within online learning environments. In G. Richards (Ed.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2004* (pp. 1250-1255), Chesapeake, VA: AACE.
- Schaller, D. T., Chow, A., Marty, P., & **Heo, M.** (2004). To Flash or not to Flash? *Online proceedings of the Museums on the Web, Arlington, VA*. Retrieved from <http://www.eduweb.com/ToFlashornot.pdf>
- Heo, M.** (2003). A learning and assessment tool for Web-based distributed education. *Proceedings of the 4th conference on Information technology curriculum, New York, NY*, 151-154. doi: 10.1145/947121.947156
- Hirtle, S. C., Hughes, S., & **Heo, M.** (2000, October). *The interaction of images and maps in the development of locational aids*. Proceedings of the First International Conference on Geographic Information Science, Savannah, GA, 291-292.

Heo, M., Morse, E. L., Willms, S., & Spring, M. (1996). Multi-level navigation of a document space. *Proceedings of WebNet*, San Francisco, CA: AACE.

SCHOLARLY PRESENTATIONS

Carbonara, D., Kush, J., & **Heo, M.** (2009, October). *Implementation of digital storytelling in an urban elementary school*. Paper presented at the AECT International Conference, Louisville, KY.

Carbonara, D., Kush, J., & **Heo, M.** (2009, February). *Instructional technology dispositions: Effects on academic success*. Paper presented at the AACTE 61st Annual Meeting & Exhibits, Chicago, IL.

Carbonara, D., Kush, J., & **Heo, M.** (2008, October). *Results of reliability analysis and test/re-test validity of instruments designed to assess the dispositions of teacher candidates toward technology*. Paper presented at the AECT International Conference, Orlando, FL.

Carbonara, D., Kush, J., & **Heo, M.** (2008, February). *Teacher candidates' disposition toward pre-service education and technology use: report of test, re-test reliability measures*. Paper presented at the AACTE 60th Annual Meeting & Exhibits, New Orleans, LA.

Heo, M., Carbonara, D. & Kush, J. (2008, January). *Digital storytelling for 21st century skills: A proposal for future research*. Paper presented at the 6th Annual Hawaii International Conference on Education, Honolulu, HI.

Myrick, L. M. & **Heo, M.** (2008, January). *Girls' computing club: A study of female high school students' perception of gender and computers*. Paper presented at the 6th Annual Hawaii International Conference on Education, Honolulu, HI.

Carbonara, D., Kush, J., & **Heo, M.** (2007, October). *Assessing the dispositions toward technology of teacher candidates*. Paper presented at the AECT International Convention, Anaheim, CA.

Heo, M., & Yi, M. (2007, March). *While you were browsing: learning through browsing an ontology-driven information system*. Paper presented at the Computer Assisted Learning (CAL) 2007: Development, Disruption and Debate, D³ International Conference, Dublin, Ireland.

Carbonara, D., **Heo, M.,** Kush, J., Martin, M., Fernandez, V., & Smith, G. (2007, March). *The use of videoconferencing to disrupt barriers and enhance the student teaching experience*. Poster presented at the Computer Assisted Learning (CAL) 2007: Development, Disruption and Debate, D³ International Conference, Dublin, Ireland.

Spradley-Myrick, L. M. & **Heo, M.** (2007, February). *WIKI as a tool to build learning community*. Paper presented at the E-Learning Conference, Albuquerque, NM.

Heo, M. (2005, February). *Social periphery for online classroom community construction*. Paper presented at the New Learning Technologies Conference, Orlando, FL.

Heo, M. (2000, August). *A usability study on Web visualization techniques*. Poster presented at the Usability Professional's Association Conference, Asheville, NC.

Spring, M. B., Morse, E. L., & **Heo, M.** (1996, October). *Multi-level navigation of a document space*. Panel presented at the Conference on Leveraging Cyberspace, Palo Alto, CA.

INVITED TALKS

Heo, M. (2014, September 4). *Effective information and communication based on cognitive psychology*. Presented at IS Colloquium, Pusan National University, Busan, South Korea.

Heo, M. (2014, August 10). *The impact of information visualization on knowledge sharing within the participatory virtual archive*. Presented at the SSK Networking Symposium, Pusan National University, Busan, South Korea.

Heo, M. (2010, December 1). *Web portals: Literature research*. Presented at the 2nd SSK Documenting Locality Colloquium, Busan, South Korea.

AWARDS

Excellence in Scholarship Award, School of Education, Duquesne University	2016
Excellence in Scholarship Award, School of Education, Duquesne University	2013
Excellence in Teaching Award, School of Education, Duquesne University	2012
Allen Kent Award, University of Pittsburgh	1999

TEACHING

SAMPLE COURSES TAUGHT AT DUQUESNE UNIVERSITY

- Cognition and Instructional Design
- Design of the Learner Experience
- Learner-Computer Interaction
- Foundations of Instructional Technology
- Digital Imagery for Educators
- Instructional Applications of Technology

DISSERTATION COMMITTEES (COMPLETED)

Served as a Chair

Rapchak, Marcia. (2017). *Social metacognition in computer supported collaborative learning environments: A comparison in an online and face-to-face information literacy course*.

Mitchell, Tamarra. (2017). *Examining the relationship between technology & engineering instruction and technology & engineering literacy in k-8 education*.

Pynos, Robin. (2016). *Student engagement and its relationship to mobile device ownership and the role of technology in student learning.*

Toomey, Natalie. (2015) *Online multimedia learning: Predicting learner media selections in the visual and verbal domains.*

**** Duquesne University's 2016 Distinguished Dissertation Award** in the area of Social Sciences

Doring, Anne. (2015). *Online knowledge sharing: How a strong community of inquiry contributes to students' willingness to share knowledge within asynchronous online learning environments.*

Hodge, Ashley. (2015). *Perceptions of an online social network as an instructional platform: The case of Edmodo supporting a professional learning community.*

Jacob, Laura B. (2012). *Using virtual worlds to identify multidimensional student engagement in high school foreign language learning classrooms.*

Mariano, Darren G. (2012). *The effectiveness of creating a sense of community in online learning with social awareness information.*

Ashbaugh, Jill A. (2009). *A study of the effects of parental involvement on the success of students on a high-stakes state examination.*

Koch, Anne S. (2009). *Teacher education and technology integration: how do preservice teachers perceive their readiness to infuse technology in the learning environment?*

Served as a Committee Member

Glenn, Amos. (2015). *The relationships of word processing in academic work and student achievement scores on the national assessment of educational progress.*

Stoffa, Rosa Cho. (2009). *An examination of the factors underlying the motivation and learning strategies of generation 1.5 Korean American students.*

Nightingale, Jennifer P. (2008). *The impact of personal response systems on student learning in undergraduate business courses.*

Brown, Jason D. (2007). *Neural network prediction of math and reading proficiency as reported in the educational longitudinal study 2002 based on non-curricular variables.*

Clement, Jeanette. (2007). *The impact of teaching explicit listening strategies to adult intermediate- and advanced-level ESL university students.*

Roth, Nicole L. (2007). *To blog or not to blog? A comparative study of the effects of blogging in the teaching of writing in the high school classroom.*

Cicciarelli, Mary Sue. (2006). *Telementoring and computer mediated discussions:*

*A description of online instructors' support.***INVITED CAMPUS PRESENTATIONS**

Creating a Powerful Online Learning Experience Sponsored by Center for Teaching Excellence and Educational Technology	June 10 – June 28, 2013
Why Use Bb Collaborate Web Conferencing? To Enhance Teaching and Scholarship Productivity Sponsored by Center for Teaching Excellence	February 6, 2013
Successful Online Learning Sponsored by Educational Technology	September 29, 2009
Teaching Online Successfully Sponsored by School of Education	May 15, 2009
Who are our students? Sponsored by Educational Technology	March 6, 2006

SERVICE

UNIVERSITY SERVICE

Provost Search Committee, Member	September 2017 – January 2018
Faculty Senate Executive Committee, Member	2016 - Present
Academic Computing Committee, Member	2016 - Present
Women in Science - Leaderboard member - Student Organization Faculty Advisor	2017 - Present
Online Educational Resources Task Force, Member	2017 - Present
Faculty Senate Assembly, Member	2014 – 2016 2008 – 2012
University IRB Committee, Member	2010 - 2016
Electronic Thesis and Dissertation Ad-hoc Committee, Member	2013
Quality Online Course Design Advisory Group, Member	2013
Search Committee for Associate Director for Educational Technology - Member	2012
Office of Research, Faculty Development Fund Review Committee, Member	2009
University Educational Technology Committee, Member	2005 - 2008
Search Committee for Manager in the Learning Technology Center, Member	2007
Productivity Tools Focus Group, Member	2006
Search Committee for Manager in the Learning Technology Center - Member	2005

SCHOOL SERVICE

School of Education Faculty Council, Member	July 2017 - Present
School of Education Tenure & Promotion Committee, Member	2017 - Present 2011 – 2013
Research Advisory Committee, Member	July 2015 - Present
Graduate Studies Council, Member	July 2015 - Present
School of Education Faculty Awards Committee, Member	2011 - present
Urban Initiative Committee, Member	2009 –2011
Online Graduate Programs Ad-hoc Committee, Member	2008 –2009
Carnegie Project on the Education Doctorate (CPED) Core Knowledge Subgroup - Member	2008 –2009

DEPARTMENT SERVICE

Doctoral Program Advisory Committee, Chair	July 2015 - Present
- Member	July 2005 – June 2015
Search Committee for Department Chairperson, Member	2007 - 2008
Search Committee for Assistant Professor for English as Second Language - Member	2006 –2007
Search Committee for Assistant Professor in English Literature - Member	2005 –2006

PROFESSIONAL SERVICE

Editorial Board Member	
- Journal of Records Management & Archives Society of Korea	2015 – present
- Association for Digital Documents	2012 - present
Ethics Committee Member	
- Records Management & Archives Society of Korea	2015 - present
Board of Directors, International Member	
- Korea Library and Information Science Society	2014 - present
Adjunct Reviewer	
- Journal of Educational Research	2011- present
Journal Ad-hoc Reviewer	
- Computers in Human Behavior	2017
- Computers & Education	2017
- Online Information Review	2016 – present
- Journal of Librarianship & Information Science	2016
- Behaviour & Information Technology	2015 & 2017
- Information Development	2015 & 2017
	2012 & 2015

- Journal of Interactive Online Learning	2014
- Software Quality Journal	2014
- New Review of Hypermedia and Multimedia	2010 – 2013
- Journal of Computer-Mediated Communication	2013
- Information Technology & People	2012
- Language, Culture and Curriculum	2009
- International Journal of Internet and Enterprise - Management	2008
- International Journal of Information and Communication	2002
- Information Processing & Management	
Tenure & Promotion External Reviewer	
- West Virginia University	2012
Conference Invited Reviewer	
- Eighth International Conference on Computing, Communications and Control Technologies	2009
- Ninth Pacific Asia Conference on Information Systems	2005
Panel of judges for the Student Research Competition	
- Hypertext 2008 Conference	2008
Invited External Reviewer	
- Blackboard™ - Greenhouse Exemplary Course Program	2007
Conference Organizing Committee Support Member	
- Annual Meeting of the Classification Society of North America	1999
- Varenus Workshop: Cognitive Models of Dynamic Geographic Phenomena and Their Representations	1998
- Conference on Spatial Information Theory	1997

COMMUNITY SERVICE

Vincentian Academy Board of Directors – Member	2010 – 2012
G-20 Korean Language spokesperson (Welcome Video Recording)	2009

PROFESSIONAL MEMBERSHIPS

- Association for Computing Machinery (ACM)
- Association for Digital Documents
- Records Management & Archives Society of Korea