J. Philip East

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Professional Preparation

University of Oregon	Curriculum & Instruction (CS Ed.)	Ph.D., 1964
University of Oregon	Computer Science Education	M.S., 1978
Southwestern State College (Oklahoma)	Mathematics Education	B.S.Ed., 1973

Professional Appointments

08/2018 – present: Emeritus Associate Professor of CS Education, University of Northern Iowa
08/1990 – 07/2018: Assistant/Associate Professor of CS Education, University of Northern Iowa
09/1983 – 08/1984: Assistant Research Specialist, Grad. School of Education, UC Berkeley
01/1978 – 08/1983: Lecturer, Computer Science Department, University of Oregon
08/1973 – 05/1977: Mathematics Teacher, Vera C. O'Leary Junior High, Twin Falls, ID

Awards and Honors

Identifying student misconceptions of programming, a co-authored paper, was nominated for and voted number 1 in the Top 10 SIGCSE Technical Symposium Papers of the first 49 symposia. February 2019.

Received Volunteer of the Year Award from CSTA (Computer Science Teachers Association), July 2019.

Select Peer-Reviewed Products

L.C. Kaczmarczyk, E.R. Petric, J.P. East, & G.L. Herman. Identifying student misconceptions of programming. In *Proceedings of the Forty-First SIGCSE Technical Symposium on Computer Science Education*, 107-111. (2010).

A. Pears, A. Berglund, A. Eckerdal, P. East, P. Kinnunen, L. Malmi, R. McCartney, J.E. Moström, L. Murphy, M.B. Ratcliffe, C. Schulte, B. Simon, I. Stamoulia, & L. Thomas. What's the problem? Teachers' experience of student learning successes and failures. In *Proceedings of Koli Calling, 7th Baltic Sea Conference on Computing Education Research*, Nov. 2007.

J.P. East. On models of and for teaching: Toward theory-based computing education. In *Proceedings of the 2nd International Computing Education Research Workshop*, 41-50, September 9-10, 2006. University of Kent, Canterbury, UK.

J.P. East & J.B. Schafer. In-person grading: An evaluative experiment. In *Proceedings of the Thirty-Sixth SIGCSE Technical Symposium on Computer Science Education*, 378-382. (2005)

J.P. East. Applying Software Design Methodology to Instructional Design. *Computer Science Education, 14*(4), 257-276. (2004)

Grants Received

J Ben Schafer, J Philip East, Sarah Diesburg & Dana Atwood-Blaine. The Development of a Statewide Network for Teacher Preparation in Computer Science: The University of Northern Iowa Partnership for CS Teacher Preparation (Grant). Funded by the National Science Foundation in response to the call for CS for All: Research Practitioner Partnership (RPP). (2018-2020: $300,000)

J Ben Schafer, J Philip East, Mark Fienup & Stephen Hughes. Google CS4HS Grants. (2010-2015: $12,500-$35,000 each).

Lisa Kaczmarczyk & J Philip East. Collaborative Research: Development of Concept Inventories for Computer Science. Funded by NSF CISE Directorate, CPATH Program (transferred from Washington University, St. Louis, to UNI). (2009-2010, $54,616)

J Philip East, S Rebecca Thomas, V Eugene Wallingford, Janet Drake & Walter Beck. Pattern-based programming instruction. Proposal funded by the National Science Foundation to develop curriculum materials for an alternative approach to programming instruction. (1994-1995: $69,812)

Professional Service

Computer Science Teachers Association. Member of Conference Committee, 2000-2020 (all years). Program Chair: 2016. Presenter: 11 times.

ISTE/CSTA Standards and Accreditation Committee. Chair: 2001-2003. Member: 2010-12, 1996-97. Assisted in evaluating original draft in 1989-90. During my chairmanship, the standards were substantially revised to be detailed capabilities (rather than knowledge).

SIGCSE of ACM. Discussant at Doctoral Consortium: 1999-2007, 2010-2012 (supports and critiques work of candidates seeking CS Ed doctorates). Reviewer SIGCSE Technical Symposium: 1992-2018 (not 92, 97, 98). Reviewer ITiCSE Conference: 2004-2017. SIGCSE Program Committee: 2017-2019.

SIGCS of ISTE. Chairperson: 1990-92, 1999-2003. Editor, *Journal of Computer Science Education* and *JSCE Online*: 1998-2003.

I have also participated in a host of other professional activities including:

- Serving on the Steering Committee for the Midwest Instruction and Computing Symposium (26 years)
- Reviewing teacher preparation programs for NCATE/CAEP (7 years)
- Reviewing for ACM curriculum revision (3 times—they occur approximately every 10 years)
- Co-chairing the planning and presentation of the DoDEA/UNI Computer Science Institute—a week-long sequence of professional development activities for teachers from Department of Defense School (2 times)
- Presenting at ISTE Conference (13 times)
- Presenting at ICUE Conference (13 times) and leading the development of a proposal to the BOEE of Iowa's DOE for the certification of teacher in computer science (circa 1992, not approved)

Possible Impact

K12 CS Teacher Preparation Standards

I believe the revision to the Standards under my chairmanship positively influenced CS teacher education curricula and programs and, due to the structure of the standards, thinking related to K12 CS education.

Influencing Developing CS Education Practitioners

I believe my participation in the SIGCSE Doctoral Consortium (and the late-night discussions of teaching and learning CS) positively influenced the thinking and work of some of those then-student participants.

Influencing Practicing CS Educators

I believe my discussion with faculty colleagues and CS Ed students in person, through conference presentations and papers, and through formal instruction have positively influenced their thinking and work with respect to the teaching and learning of computer science.