Gender and the Choice of Technological Careers:
Thoughts on the Nature – Nurture Debate

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Lecture in the context of the lecture series "Gender als kritische Perspektive, erweiteres Verständnis, nachhaltige Gestaltung", 23 October 2015, 11.00-12.20, Schneiderberg 50, 30169 Hanover, room V 108.

While there is agreement, globally, that a gender imbalance exists in the scientific and technological fields, there is less agreement regarding what, if anything, should be done about it. In this presentation Dr. Trauth will first address the question of why the fields of science, technology, engineering and mathematics (STEM) should care about the gender imbalance. She will then discuss causes and manifestations of barriers to women participating in STEM, including the debate about nature vs. nurture. She will conclude with a consideration of interventions to address the gender imbalance. In her talk Dr. Trauth will draw from research she has been conducting since 2000 that is directed at understanding the causes and effects of the underrepresentation of women in the information and communications technology (ICT) professions. The focus of her work has been on understanding the interplay among cultural, institutional and individual factors that can account for women's participation (or nonparticipation) in the ICT field. She has collected 200 life history interviews from women working in the IT profession in: Australia, Ireland, New Zealand and the United States. Analysis of these interviews reveals a wide range of influences on women's choice of and retention within their technological careers. Her results show a need for interventions that take into account the wide variation of both influences on women and women's varied responses to them.

Eileen M. Trauth

Dr. Eileen M. Trauth is Professor of Information Sciences & Technology at the Pennsylvania State University where she also holds affiliate appointments in the departments of: Women's, Gender & Sexuality Studies; Management & Organization; International Affairs; and Labor Studies. Dr. Trauth's research is concerned with societal, cultural and organizational influences on the information technology professions with a special focus on gender and social inclusion. She is particularly interested in the linkages among diversity, social inclusion and economic development.

Dr. Trauth has lectured about and investigated issues of gender underrepresentation in the information technology professions in Austria, Australia, Finland, Greece, Ireland, New Zealand, Romania, South Africa, Spain, the UK and the United States. She has conducted over 200 life history interviews with women working in the information technology field where she has collected stories of barriers and support. Her current work is focused on the intersectionality of gender and other identity characteristics such as race, ethnicity, socio-economic class, sexuality, nationality and disability status. Dr. Trauth has written extensively on the topic of gender diversity and social inclusion. She is editor of the *Encyclopedia of Gender and Information Technology* and two conference proceedings on the topic of diversity and social inclusion. During 2008 she held the Universität Klagenfurt (Austria) – Fulbright Distinguished Chair in Gender Studies, and is currently serving on the scientific advisory board for *Female Empowerment in Science & Technology Academia (FESTA)*, a European Union, Seventh Framework Programme for Research and Innovation. With funding from the National Science Foundation, Dr. Trauth has written a play, *iDream* (iDreamThePlay.com), based on her interviews with women in the information technology field, as a way to increase awareness about gender barriers in the scientific and technological professions. Trauth was also the recipient of a Fulbright Scholar award to investigate socio-cultural influences on the emergence of Ireland's information economy (1989).

Her research has been supported by grants from the Fulbright Foundation, the National Science Foundation, the Australian Research Council and Science Foundation Ireland. She is currently co-editor-in-chief of *Information Systems Journal*, and has published 9 books and over 150 scholarly papers on her work on gender and social inclusion, the information economy, qualitative research methods, critical theory, global informatics, information policy, information management, telecommunications policy and information systems skills.