Mediating The Transition Between College and Work

Kedmon Hungwe
Mary Raber

Michigan Technological University

The study focuses on the transition from college to the workplace, and the implications for knowledge and skills that support that transition. The relationship between educational and workplace settings has been of longstanding interest (Robinson, Stubberud, 2014). Historically, the focus of educational institutions has been on knowledge organized in the form of subject matter, while workplaces organize knowledge in different ways, such as for production (Beach & Vyas, 1998). This has resulted in discontinuities in knowledge, and skills for students entering the workplace. Plichta & Raber (2001) identified several personal and professional attributes that were considered critical to the success of a working engineer, but were generally lacking in new engineering graduates. These included skills in communication, and the ability to lead and work effectively as a member of a team.

Alternative instructional models developed at Michigan Technological University are designed to mediate the transition between college and the workplace. One such model is the capstone project. This study focuses on the consequences of introducing
such mediating models. The transition between college and work is conceptualized as a boundary crossing between activity systems, an activity being the engagement of individuals toward a certain objective (Engestrom, 2000).

A qualitative design is employed. The participants are students who have participated in a university designed entrepreneurial activity that leads to a work placement such as a co-op. During co-ops employers are expected to provide full-time paid work related to the student’s major. The study uses interviews to provide an understanding of students’ experiences as they move through the boundary between college and work (see Flynn, Pillay & Watters, 2016). Overall, the study contributes to knowledge about college to work transitions and ways of mediating that experience. Activity theory predicts contradictions and tensions within the overall structured experience which will be of interest.

• Author(s) Biography (200 words each):

Kedmon Nyasha Hungwe

Dr. Kedmon Hungwe is Professor at Michigan Technological University in Cognitive and Learning Sciences. He studies cognition and learning in a wide range of contexts including school, the workplace and informal learning. His work has been published in Mind, Culture & Activity; Journal of Women and Minorities in Science and Engineering; Journal of Curriculum Studies; Media, Culture & Society; and Journal of Adult Development; among other places. The collaborative work presented here is a continuation of a significant thread of his work that focuses on cognition, work and societal change, and how individuals adapt to 21st century changes. One of his most recent studies focused on historical changes in machine tools and the consequences for adult learning. Dr. Hungwe’s theoretical orientation is cultural-historical, in the tradition of the psychologist Lev Vygotsky. He has also applied concepts from activity theory to study contexts of learning. This work is an example of this approach and complements well with co-author Professor Raber’s professional interests.

Mary Raber

Mary Raber, BSME, MBA is a Professor of Practice and serves as Assistant Dean for Academic Programs for the Pavlis Honors College at Michigan Technological University. She also serves as co-Director of the Innovation Center for Entrepreneurship and Director of the Global Leadership Program. In her prior role, Raber oversaw the implementation, growth and assessment of the highly distinctive undergraduate Enterprise Program at Michigan Tech since its inception in 2000. In her current role, Raber leads the efforts in curriculum development, evaluation and assessment for the Pavlis Honors College as well as management of the Global Leadership program and Innovation Center for Entrepreneurship. Raber also teaches courses in leadership,
human-centered design and lean start-up. She is a co-founder of MicroDevice Engineering, LLC, a new start-up focused on bringing rapid diagnostic devices to market. She is currently pursuing a PhD at Michigan Tech where the focus of her research is in engineering education. Prior to joining Michigan Tech, Raber had a 15 year career in the automotive industry where she held various positions in program and engineering management at OEM and Tier I suppliers.