Proposal Submission 2012 Emerging Technologies Conference



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Learning Technologies and Strategies for an Aging Population
Does One Size Fit All?

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As the Baby Boomer generation continues to dominate the composition of the global population, demographic patterns have led to increases in median ages of the workforce and higher learning. The population is aging in industrialized nations and the recruitment and retention of older adults will become a dominant issue in the coming decades. Learning is an important component of recruiting and retention. Integrating emerging technologies as part of an organizational learning strategy is critical for maintaining a highly skilled workforce.

Recent studies indicate that older individuals are becoming increasingly important in the skilled workplaces of many countries. Subsequently, employers report difficulty even in filling jobs that do not require skilled qualifications. In high skilled and complex jobs, organizations need to develop strategies to retain workers well past the age at which decades before, workers began to think of retiring. Therefore, it is imperative that issues associated with the training and education of older workers is addressed as the world economy recovers and the demand for skilled labor increases.

In matters of emerging technologies, however, older workers are less receptive and skilled in solving novel problems. For example, a psychological phenomenon called fluid intelligence (G_f), suggests that age differences in information processing have a significant and measurable effect on older workers' performance. The implications of the effects of aging on learning capabilities to individual and organizational productivity may produce results of a life cycle orientation whereby job needs, preferences, and productivity change with age.

Older individuals possess a higher level of knowledge retention known as crystallized intelligence (G_c). However, because of decreasing levels of fluid intelligence (G_f) older persons are less receptive to the novel problems of adapting to new technology when compared to younger peers. The problem in juxtaposing G_c , G_f , and the aging population is creating a conundrum in redefining training needs and preferences that change with age. A redefinition of learning strategies can be used to take advantage of the learned Knowledge, Skills, and Abilities (KSAs) of older persons and integrating them into a comprehensive education and workforce retention strategy.

Understanding age-related differences in learning, presents a longitudinal opportunity for new learning and delivery methods. Organizations and learning institutions will be challenged to integrate emerging learning technologies into an aging population that is less receptive and not possessing the levels of G_f required to effectively use novel concepts. Taken together, these results present an opportunity to develop strategies whereby identifying learning needs and preferences that change with age are used to benefit the experiential learned life skills of older persons and integrating them into emerging technologies and workforce learning strategies.

The attendees of this presentation will learn about the emerging challenges facing organizations and institutions to develop effective learning strategies as the median age of a global population increases. The presentation will address the key characteristics of older adult learners and the need for emerging learning technologies to integrate relevance with experiential learning. The audience will gain practical information and knowledge to process and reflect on the issues of emerging learning technologies for an aging population.

The presentation of this session will incorporate numerous active learning elements including guided group interaction and group participation.

References

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. Heidelberg, Germany: Springer.
- Aizpurua, A. & Koutstall, W. (2010). Aging and Flexible Remembering: Contributions of Conceptual Span, Fluid Intelligence, and Frontal Functioning. *Psychology and Aging* 25(1), 193–207. doi: 10.1037/a0018198
- Armstrong-Stassen, M., & Templer, A. (2005). Adapting training for older employees: The Canadian response to an aging workforce. *The Journal of Management Development,* 24(1), 57-67. Retrieved from http://search.proquest.com/docview/216351523?accountid=35812
- Brooke, L. (2009). Prolonging the careers of older information technology workers:

 Continuity, exit or retirement transitions? Ageing and Society, 29(2), 237-256.

 doi:10.1017/S0144686X0800768X
- Maurer, T., & Weiss, E. (2009). Continuous learning skill demands: Associations with managerial job content, age, and experience. *Journal of Business Phycology 25* (1). 1-13. doi: 10.1007/s10869-009-9126-0
- Morris, M. G. (2000). Age differences in technology adoption decisions: Implications for a changing work force. *Personnel Psychology*, *53*(2), 375-403.
- Myers, C., & Conner, M. (1992). Age differences in skill acquisition and transfer in an implicit learning paradigm. *Applied Cognitive Psychology*, 6(12). 429-442.

Smith, E., & Smith, A. (2010). Old dogs, new tricks: Training mature-aged manufacturing workers. *Journal of Workplace Learning*, 22(5), 277-291.

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