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Critical Thinking in the Information Technology Program: A **Deciding Factor for Employment**

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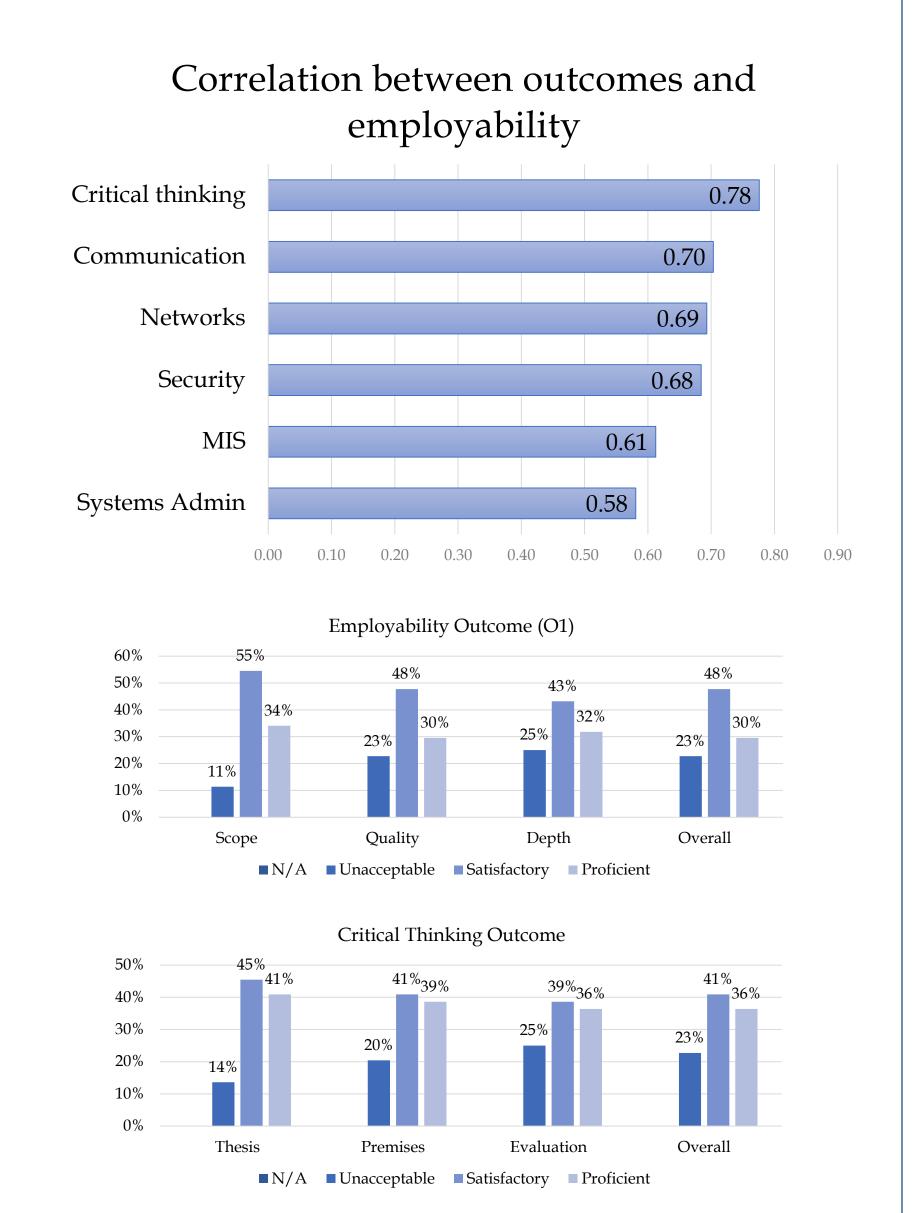
Critical thinking in the Information Technology program: a deciding factor for employability

Introduction

"[C]ritical thinking [as analysis and evaluation] is an active skillbuilding process, not a subject for passive academic study" (Mayfield, 2001, p. 5). Thus, it cannot be mastered through the technical content of a major alone. This suggests that there is a crucial gap between a purely vocationally focused approach to teaching and the higher-cognitive skills (i.e., learning through connecting ideas together) necessary for students "to compete successfully in securing employment or progressing in their chosen field."

Results

Since many of Franklin's graduates are completing their degrees in order to advance their careers, it is reasonable to look at correlations between individual criteria and the summative "Employability" outcome of our Capstone Project. A statistical analysis of the data shows that the correlation between critical thinking and employability is significantly the strongest. While select technical skills are important, the largest single contributor to employability is not the technical content of the major, but rather the ability of students to think, reason, and communicate critically about the technical content.



Problem and Motivation

Business leaders and educators around the globe realize that critical thinking is in short supply across the board, and managers and employees must be able to think critically for both personal and organizational success (Pearson North America, 2010). Accordingly, rather than just focusing on teaching any single technical outcome, the IT Major strives to graduate versatile, broadly skilled individuals prepared to tackle a wide range of problems in a rapidly changing world of intensifying complexity (Paul, 1995, ch. one; see DePauw University for the benefits of studying critical thinking).

References

DePauw University. Why major in Philosophy? DePauw, Academics. http://www.depauw.edu/academics/departments-

programs/philosophy/why-major-in-philosophy/ (accessed Sept. 21, 2014).
Mayfield, M. 2001. Thinking for yourself: Developing critical thinking skills through reading and writing. USA: Thompson Learning, Inc.

Paul, R. 1995. Critical thinking: How to prepare students for a rapidly changing world. Dillon Beach: Foundation for Critical Thinking.

Pearson North America. 2010. Critical thinking: Today's number one skill. Critical thinking video from the education services and technology company Pearson, August 30.

http://www.youtube.com/watch?v=8WW4VZwkra4&feature=related (accessed September 20, 2014).

Talavera, I. 2006. The problem of teaching critical thinking: Three approaches. NADE Digest, 2 (1), 63-69.

Whittaker, T. 2014. Annual assessment report: Information technology. Department of Computing Sciences and Mathematics, College of Arts, Sciences, and Technology, Franklin University.

Program outcomes Employability

 Considered holistically, the student demonstrates the ability to produce work commensurate with the expectations for an entry level employee in my organization.

Critical Thinking

 Considered holistically, the student demonstrates the ability to apply logical thinking and critical analysis.

Conclusion

Statistical research supports the hypothesis that employability is most strongly correlated with critical thinking than any other single technical outcome in the Information Technology and Information Security program.

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