Background

The Threads model represents a natural evolution of contextualized computing education, extending the application of that idea to an entire undergraduate computing degree. The principle of contextualization begins with the very first class and continues until graduation. Threads includes an infrastructure for intentional advising, as well as the development of robust software support for administrators, advisors, educators, and students. Threads represents both a process for understanding and developing curricula, and a set of outcomes derived from the application of that process. In this project, we seek to apply the Threads process at a set of diverse institutions and to examine how the outcomes differ on each campus.

Goals

There are four strategic goals for this project:

♦ To foster among partnering institutions an understanding of the process by which the Threads concept evolved and successfully changed CS curriculum at Georgia Tech.
♦ To develop systematic ways to share ideas and to coach partners over the next 3 years as they attempt to tailor this process to their own unique settings.
♦ In tandem with the first year, GT will continue to develop tools and advising processes to best support Threads at GT for adaptation at partnering institutions.
♦ To disseminate our results, experiences, software support infrastructure, and development process, and assessment tools to the larger computing community. By the end of this process, we plan to provide lessons learned, software, and several examples of Threads-based computing degrees.

GT Global Office Initiatives will include workshops, site visits, website development, phone coaching as needed, sharing supporting tools and best practices; and on-going creative problem solving with and among partners in support of successful Threads adaptation.

Assessment Plan

External Evaluators are focusing on assessing 1) how effectively we communicate and coach our partners through the process of moving from their traditional curriculum to using the notion of Threads; 2) the extent to which the process is actually transferred successfully among partners; and 3) the extent to which the developed supports for Threads are adapted for use by the partners. Assessments include workshop evaluations, focus groups, individual interviews, systematic feedback system to track progress for curriculum change in partnering institutions, and use of surveys.

The alliance represents variety in size, student demographics, educational mission, technical emphasis and geography. Partners include:

Armstrong Atlantic University

Brooklyn College of CUNY

Georgia Institute of Technology

Kennesaw State University

Southern Polytechnic University

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