

**AITP Sponsored Development of a Comprehensive, Consistent,
Assessable, and Learner Centered Set of Course and Program
Outcomes for Undergraduate Curricula in Information Systems and
Information Technology: A Community Centric Multi-Year Vision**

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The AITP has been involved in Information Systems Curriculum since the early 1980's and has enthusiastically sponsored the vision herein to be presented. EDSIG has likewise unanimously agreed to support and facilitate the AITP curriculum initiative. The following concerns are important in considering an optimal direction for the AITP work:

- EDSIG would prefer that this work not be viewed as competitive with either AIS or SIGITE initiatives. Optimally, the AITP work products should be synergistic with both the AIS and SIGITE results;
- On a national basis, the AIS has been working to extend the IS2002 IS curriculum specification;
- SIGITE has developed a new release to its information technology model curriculum;
- ABET has been responsible for accreditation of both IS and IT curricula, and in both cases expects to see universities embracing outcomes based assessment models patterned after the work of Gloria Rogers;
- Regional accrediting agencies expect academic programs to be assessed in an outcome based manner;
- The Center for Computing Education Research (CCER) has been providing an assessment exam for programs of information systems; the Information Analyst Exam (the ISA) enables IS programs to compare their effectiveness on outcome compared to a national sample;

--The CCER exam simultaneously certifies examinees ability to achieve skills expected of the IS industry.

EDSIG members have expressed that the AITP mission certainly involves the Information Systems Discipline. In addition members expressed interest that attention could be directed to consider the work done during the past years regarding the newly specified discipline "information technology" and the model curriculum developed by SIGITE. The question was asked, could there be some way to consider both models under the umbrella of the AITP? And can this action be taken in a win-win mode with both SIGITE and AIS?

In the spirit of affirmatively answering the umbrella role for the AITP, we have asked a more fundamental question: What should the goals be for any curriculum specification? And then: How could we support such goals in a comprehensive, consistent and useful manner?

The members of this panel will argue about the relative merit of the following assertions regarding curriculum, and if these assertions are sustained, then argue about the desirability of developing products that will support the educational community in achieving its goals, namely supporting multiple curricula (IS and IT). The assertions this panel will study include:

1. Curriculum must produce a graduate who has skills necessary to work in a closely related industry immediately upon graduation. Such linkages between curriculum and the work-place must be rigorously defined, and be based on industry scrutiny of skill sets and of graduate performance. Good students must be able to get good jobs which are known to be available. Measurements must document the veracity of this process and relationships.
2. Students should be part of a team-based, learner centered environment which teaches them to take responsibility for their immediate as well as life long learning. The outcome formulations must encourage student excitement in the discipline. Within the community success strategies must be shared among institutions to improve the outcomes for students and employers.
3. Curriculum models must be flexible and easily usable for educational institutions that have individual requirements, yet need to be consistent with a national model that assures completeness as well as focus. Therefore, the AITP work-products will focus on development of outcomes and related performance measures with identification of critical thinking requirements and learner centered mechanisms that become known to be effective.
4. Curriculum outcomes, as well as performance measures, must be assessable and national CCER exams should be available to validate the educational experience. The ISA exam already exists. A similar exam will be developed for the IT model.

Also, new specialty track exams (see section 7 below) will be developed for identified and developed specialties.

5. Curriculum outcomes must be cognitively paced to enable learner achievement consistent with desired outcomes. (True prerequisite outcomes must be established by measurement).
6. Curriculum outcomes must be limited in number (perhaps 4-6 per course) to allow clear assessment, and must therefore be written as blends of knowledge. Collections of outcomes must be structured according to these blends. Outcome performance measures must define the nature of skills to be attained, and must satisfy program outcomes for the respected discipline (or track, see 7).
7. Curriculum tracks (or focus areas) must be established based on industry hiring of graduates. The tracks must be defined in terms of outcomes and skills. A CCER specialty exam with ICCP certification will be established for significant tracks (current tracks might include a. Web Development, b. Web Site Management, c. Information Security Assurance, d. Data Management and Information Quality, e. Network Specialist, and f. Information Systems Analyst).

Pending the outcome and clarification of the above assertions by the panel and through audience discussion, task forces will be developed to work on the many aspects of this proposal. The goal of this AITP sponsored effort will be to involve as many members of the IS and IT community who are interested in participating. Please let us know of your interest in participating in this process, and in what areas you wish to be involved.