

A TASK BASED MANAGEMENT APPROACH FOR TECHNOLOGY INSTRUCTION IN A RAPID DEGREE COMPLETION PROGRAM

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INTRODUCTION

Aurora University developed A Bachelor of Science Program in Professional Studies (BSPS) that is directed at working professionals who have not as yet received an undergraduate degree. The BSPS program is offered in six week terms allowing thirty five contact hours for each three credit hour course. Students involved in this program are encouraged to also enter the LEAP program.

LEAP allows practicing professionals to examine their life experiences from an academic standpoint and develop, under the guidance of a faculty member, experience essays, that document outcomes that may be worthy of university credit. LEAP essays do not necessarily have a direct mapping to existing course offerings of the university. However, each LEAP essay is assessed by a faculty member in the program most closely related to it. This faculty member then establishes the academic merit of the petition and recommends to the LEAP committee what specific credit, if any, and at what level should be awarded.

It is not unusual for students to establish credit for information technology literacy by demonstrating their proficiency in word processing, spreadsheet use and presentation graphics. Albeit, it is highly unusual for students to demonstrate upper division outcomes that are associated with conceptual foundation prerequisite course work.

Caterpillar Corporation has a highly automated plant located in Montgomery Illinois, which is approximately five miles distant from Aurora University. Caterpillar, being technologically current, had established training centers at its plant site to enhance their employees knowledge level. While the notion of corporate universities had already been established (Meister, 1998, p. 6-9) this was not an election for Caterpillar. This corporation did, however, have many employees that had demonstrated their worth to the corporation but had not completed a baccalaureate degree and were lacking in width and breadth of education in the arts and technology. A partnership was developed between Caterpillar and Aurora University that allowed select employees in cohort groups enter the BSPS program of study.

The question of program delivery was of immediate concern. Rather than establish a specific asynchronous distance learning system directed at the corporate culture of Caterpillar, Aurora University elected to establish a “virtual campus” on the Caterpillar site. This campus would use all the technological training facilities at Caterpillar, but taught by regular Aurora University faculty. Thus, students would enjoy easy access to classrooms and experience as little as possible perturbation in their work schedules. While the program enjoyed success it was not without difficulties. Students needed to perceive, when they entered the classroom, that they were at Aurora University and not at Caterpillar and course outcomes needed to be established and assessed in a rapid time frame.

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THE INSTRUCTIONAL OUTCOMES

Teaching in this environment requires unique and adaptive pedagogical techniques. The course of specific interest to this discussion is titled "Information Systems & Research" which is essentially an undergraduate MIS course. While the stated outcomes for this class are typical, Aurora University (AU) and Caterpillar (CAT) faculty and respective management had decided the program as a whole should produce other assessable outcomes and have a process established to do the assessment. These outcomes are essentially delineated in "Liberal Arts for Business:

A Partnership Built by Faculty" (Rao, 1999, p. 8) and reflect the AU-CAT partnership:

Understand data and apply learning

- predict how one piece of data can affect an entire process
- organize wide ranges of narrative or computational data information through basic computer applications
- evaluate performance quickly and completely, such as the teams of coworkers

Think and function independently

- adapt to unforeseen circumstances with minimal
- foresee and solve problems
- take charge of their own career education

Communicate and work effectively in teams

- work in teams to accomplish tasks
- employ appropriate and necessary social skills
- present information coherently
- help to train others

Integrating these general purpose outcomes and the technical outcomes required by a MIS course and deliver them in six weeks was a challenge. However, by using a process where the students were divided into task groups each with specific well defined leadership and evaluation, several knowledge and assessment outcomes could be met. In addition to the above process a mid-term written exam consisting of essay questions and a case study was established with decision support spreadsheet computer lab exercises.

THE TASK BASED PROCESS

Listed below is the algorithmic pedagogical technique that uses task based management to achieve the above objectives. The narrative is basically presented as the students would receive it in order to be as useful as possible for readers of this document.

Information Systems & Research Task Based Project

The commercial use of the Internet is becoming a vital part of any enterprise. How an individual enterprise is represented and what is displayed is critical to the users perception of the value of that enterprise. Most major corporations have significant Internet web sites. Your research area is going to be focused and task distributed. Students in Information Systems and Research will follow this procedure to satisfy their research requirement:

1) You will be divided into teams of 4-5 individuals. Membership selection will be

based upon meritorious argument. You will keep this same team membership for your “Team Presentation”, however, you will have a different task and an oral report for that project.

- 2) Your team will elect to critique and evaluate corporate web sites that have a functional grouping, such as automotive sites.
- 3) You will all agree on a set of ten metrics for evaluating these sites. Each team member will evaluate one site according to the agreed upon metrics. Print out a few pages of each site.
- 4) One team member will be designated to coordinate and present the information in a completed written report. This team member is not required to critique a web site.
- 5) The written report must conform to the technical guidelines in the syllabus. (Printed web pages are considered attachments and not part of the narrative.)
- 6) Make sure you include your metrics in the report.
- 7) An index is required indicating editor of the document and the author of each web site evaluation.
- 8) Your metrics should have a level of specificity associated with the functionality of the sites you are evaluating. (The whole class better not have the same metrics!)

Information Systems and Research Team Presentation

- 1) You will keep the same team that you utilized in your research project.
- 2) Established a set of metrics to evaluate each other and record the evaluations according to these metrics and submit them privately to your professor.
- 3) Prepare an oral presentation using presentation graphics software of your teams research report.
- 4) Grading will be according to Team Presentation in your syllabus.

ASSESSMENT

An outcome assessment matrix was established by Aurora University (Voight, 1998) in order to assure that the CAT students were attaining established goals. The task based management technique combined with the mid term exam and computer laboratory exercises produced an assessable program. The process was quite successful although very intense. Student perceptions indicated a high level of satisfaction as well as the independent AU-CAT assessment goal assessment matrix. Problematic areas were associated with creating an atmosphere where CAT students would perceive that they were on an AU campus when they entered a technical training room rather than an extension of Caterpillar. Techniques of shutting off pagers and cell phones and strong instructional delivery to adult students helped create the proper environment for a “Virtual but not Distant Campus”. The results indicate that rapid technological education is possible and assessable with good outcome.

WORKS CITED

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Voight, T. (1998) New College Program Assessment Matrix - Fast Track Courses in the Major, New College of Aurora University