A Bachelor Degree Program in Surveying/Geomatics Offered to Place-bound Students: Measuring Success

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General Outline

- Professional Education in Surveying/Geomatics
- Distance Education
- Program at Michigan Technological University, U.S.A.

Professional Education in Surveying/Geomatics

- Need for Professional Education
- Access to Professional Education
- Non Traditional Student
- Alternative Delivery of Education

Distance Education

- An Old Concept
- Why Now?
- What has Changed Now?
- Accessible to Most Students
- Modern Delivery Techniques

USDLA Definition

"acquisition of knowledge and skills through mediated information and instruction, encompassing all technological and other forms of learning at a distance"

Distance Learning Contd.

- Learning in a university without space and time
- University is based on information network
- University is "virtual" – not physical
Advantages of Distance Learning

- Students and teachers do not need to be physically present at one location
- Learning and teaching do not need to happen at the same time

Advantages of Distance Learning Contd.

- Students can stay and work at home
- Materials are available everywhere, even mobile
- Student becomes an active learner

Advantages of Distance Learning Contd.

- Lighter workload
- Lessons can be reviewed at will and as many times as needed
- Less competition from peers

Some Disadvantages of Distance Learning

- No direct interaction with course instructor
- Course instructor not readily available for help
- No peers for help or discussion
- No real college experience

Program at Michigan Technological University, U.S.A.

- Statutory Requirement of Bachelor Degree
- Request from Industry
- Large Number of Interested Students
- Facilities Already in Place

Program at Michigan Tech. Contd.

- Early Years
- Accreditation Issue
- Present Status
- Maintaining Quality
Course Delivery
- Videotaped delayed delivery of courses
- Sites and Site Monitors
- Assignments, quizzes and exams
- Laboratory exercises (Practicals)

Accreditation Issue
- State Board of Licensing for Professional Surveyors
- Accreditation Board for Engineering and Technology
- Changes Needed

Necessary Components
- Program Administration
- Course Development and Delivery
- Technology Development
- Student Services
- Course Evaluation
- Faculty Incentives

Measuring Success
- Graduation Rate
- Student Satisfaction
- Placement
- Employer Satisfaction
- Career Advancement

Statistical Data
- 10 Years of Continuous Course Offering
- 154 Students
- 22 graduates
- Many satisfied employers

Ask the Graduates
- Survey posted on the web
- Requests sent to last known email address
- Twenty six responses received
- Generally favorable assessment
What the Graduates Said

- Twenty six Responses
- Ten graduates
- Nine passed FLS in the first attempt
- Five already licensed.
Questions 1 – 5, 13, 14

Questions 6 – 12 on a 3 point scale as follows

- Very Useful = 3
- Somewhat Useful = 2
- Not Useful = 1

Conclusions

- Student satisfaction
- Employer support
- Students professional achievements
- Students career promotions