

# Developments in Business Simulation & Experiential Exercises, Volume 18, 1991

## SYSTEMS ANALYSIS AND DESIGN: WHY UNDERGRADUATE EDUCATION GETS A FAILING GRADE

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### ABSTRACT

There seems to be a growing gap between what is being taught as systems analysis and design, and what is being practiced in the work place.

The traditional role of colleges and universities has been, at the minimum, to teach systems analysis and design as it should be practiced in the work place. If there is a gap, then either practitioners are ignorant of what they should be doing or colleges and universities are out of touch with reality. With case raises issues to be addressed by the academic sector.

The purpose of this panel discussion is to determine whether there is a gap, and to identify the issues that colleges and universities should be addressing.

### PROCEDURE

The format will be an open, roundtable discussion involving all who attend. All present will be encouraged to participate. A summary of the discussion will be forwarded to those who request it.

#### Initial Issues

If MIS practitioners are not going about the analysis and design of systems the way they should, the issue for colleges and universities is how to better educate students and their potential employers.

If colleges and universities are teaching obsolete, irrelevant, or unusable methodologies, then the issue for them is to determine what they should be teaching, and how to educate faculties and change curriculums.

#### Discussion Outline

To motivate the discussion, the initial question is to determine how to best prepare students for a career in analysis and design of information systems. The discussion will begin with the following topic areas:

#### I. Current practices in organizations that hire our students

The majority of organizations that hire students are using the classical approach to systems analysis and design. Further, there is a migration toward the integration of leading edge technology into the classical approach. There is also a scattering of prototyping.

#### II. Current practices in educational delivery systems by the private sector (i.e., commercial seminars)

The private sector is teaching CASE, prototyping, object oriented programming, and repository, all in a rich environment using the latest technology with hands-on experience.

#### III. Current practices in Educational delivery by the academic sector.

The academic sector teaching is centered on the classical approach, with hands on experience using this approach and only surveying CASE, prototyping, object oriented programming, etc.

#### IV. The gap between what academia is teaching and the needs of organizations hiring our students.

The area in which the gap is most apparent is the level of experience that students have in leading edge technologies and emerging methodologies. The cause of this gap is related to resources available and the experience level of the faculty with new methodologies and technologies.

#### V. What should academia be doing?

What is the proper balance between vocational education and theory-oriented education? What leading edge technologies and emerging methodologies should we be teaching? In what course? What pedagogy?

Where will the search for new knowledge take place? Who are the thinkers? Who is teaching creativity? Who should be teaching it?