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Learning outcomes oriented assignments and assessment methods in an active learning environment.

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Conference theme: Outcome-based assessment

Singapore Management University uses interactive seminar style teaching in class rooms. Most of its students hail from Singapore and are generally new to active learning and constructive participation in the seminar style classes. This paper reports findings from a freshmen first term course titled IS 101: Seminar for ISM Majors.

Desired outcomes

The course requires students to use case studies, presentations, debates and in-class small group discussions to improve the following skills development outcomes (SOs).

- SO1: Analysis
- SO2: Synthesis
- SO3: Creativity
- SO4: Communication

The course has four learning objectives (LOs)

- LO1: IS dependent business processes in a company
- LO2: Creating Business Value using IS
- LO3: IT Governance
- LO4: Changing scene in the IS world and the consequences to IS students

Assignments and Assessment methods and criteria

The assessment methods have to cut across the four learning objectives and the skills development outcomes. The following matrix represents the different assignments and assessment methodologies used for the different sets of SO-LO pairs.

	SO1	SO2	SO3	SO4
LO1	A11	A12	A13	A14
LO2	A21	A22	A23	A24
LO3	A31	A32	A33	A34
LO4	A41	A42	A43	A44

The table below gives descriptions of the assignments and assessments for each of the SO-LO pairs. Individual projects 1 and 2 required each student to study a company. Group projects helped students research and structure the material for debates, presentations and case studies.

	Assignment	Assessment method and criteria
A11	Identifying three key business processes in a company.	This assignment was submitted as a part of individual project 1 and was evaluated based on the relative importance of the business processes to the company.
A12	Innovating three new business processes that benefit a company's customers and to determine whether they contribute to the top line or then bottom line of the company.	This assignment was submitted as a part of individual project 2 and was evaluated based on the feasibility and relevance to the company.
A13	Validating the value of the most compelling new business process using value innovation methodology.	Relevance of the parameters identified for the value curve to the company's customers.
A14	Effective communication - a persuasive one page executive summary requesting funds for the new business process in A13.	Based on realistic projection on time, money and other resources and the arguments on the importance of this business process to the company's future. This assignment was part of individual project 2.
A21	Student facilitated case studies on SABRE of American Airlines and American Hospital Supply Corporation.	Assessment by the instructor and the class. Instructor evaluation contributes 50 % and the student peer assessments contribute to the rest.
A22	Identifying a business process that would generate most value for the company.	Assessed as a part of the individual project 2 wherein the student had to select the most promising business process from the perspective of creating business value.
A23	Innovative business process.	Assessment benchmarked against the best possible business process.
A24	Same as A14	Assessment of articulation on the role of technology in the proposed new business process.
A31	Presentations on IT / IS maturity frameworks from INTEL's	Assessment based on the depth of understanding and the quality of

	experience.	discussion on relevance to IS professionals.
A32	The impact of the most promising business process on the company's IT architecture.	This assignment was part of individual project 2. Assessment was based on accuracy of the proposed changes in the IT architecture.
A33	Design of a dashboard to represent the state of health of the company's information resources.	This assignment was part of individual project 2. Assessment was based on correct interpretation of the problem and the creativity exhibited in the design of the dashboard.
A34	Presentations related to IT Governance.	This assignment was based on a group project. Assessment was based on qualities of research and presentation and empathy with the audience.
A41	Debates on the key issues in the evolving IS scene and case studies based on successes and failures in IS solution implementation.	Debates and case studies are jointly evaluated by the instructor and the student body.
A42	IS professional as an innovator.	The value innovation exercise in individual project 2 helped assess a student's ability to play the role of an innovator.
A43	Business process innovation.	Same as above
A44	Debates on outsourcing and presentations on governance.	Evaluated by peers and the instructor.

Outcomes Assessment

The students felt that the course encouraged them to think and walk away from the traditional rote learning methods. The transition curve was very steep given that the student presentations started from the fourth week of the course. The students felt empowered by introduction to innovation and project management methodologies. This section is deliberately kept brief given the need to keep the abstract short. Details will be provided in the full paper.