《信息系统分析》课程评价过程

Intended Learning Outcomes

Teaching & Learning Activities

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Hybrid problem based learning
- Problem case
- Lecture
- Tutorial discussions

a) **Identify** problems to be solved within a problem situation
b) **Acquire** knowledge through information **search** for problem solving
c) **Formulate** a plan to **solve** a problem
d) Work **independently** and in **teamwork**
e) Acquire **leadership** skills
f) **Communicate** effectively through report writing and presentation
g) **Describe** and **explain** the knowledge of the subject, and in addition, be able to **relate**, **apply** and **theorise** the knowledge of the subject

In formulating these outcomes, I try to:
- Indicate the level of understanding expected in terms of professional competence.
- Emphasise the development of generic and intellectual skills that a professional systems analyst would need to possess

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Assessment method

Problem case reports and presentations
Peer evaluation on generic skills
Structured tests

Mapping Learning Tasks to Outcomes

Intended Learning Outcomes	Teaching & Learning	Assessment
a) **Identify** problems to be solved within a problem situation	- Problem case 1 (feasibility study) - All problem cases (problem analysis), facilitated with a web-based system	- Reports
b) **Acquire** knowledge through information **search** for problem solving	- Problem case 2 (system proposal) - All problem cases (information search)	- Reports
c) **Formulate** a plan to **solve** a problem	- All problem cases (project planning), facilitated with a web-based system	- Reports - 2 Structured tests
d) Work **independently** and in **teamwork**	- All problem cases (group work, schedules showing individual's responsibilities)	- Peer evaluation
e) Acquire **leadership** skills	- All problem cases (through leadership rotation)	- Peer evaluation
f) **Communicate** effectively through report writing and presentation	- Presentation for case 1 & 4	- Reports - 2 Presentations
g) **Describe** and **explain** the knowledge of the subject, and in addition, be able to **relate**, **apply** and **theorise** the knowledge of the subject	- Problem case 3 & 4 (explore two approaches to system development)	- Reports - 2 Structured tests

首先明确本门课程预期培养的学生能力（a-g），为了能明确定义这些能力，教师将试图：以预期培养的专业能力的形式表示预期能力等级；强化专业系统分析中通识（非技术）和技术能力的提高。针对能力（a-g）教师安排了案例、授课、辅导讨论的教学方式，并对应采取

案例报告和汇报、学生评议非技术能力、测试等方式进行评价
。

教师发现：在常规的系统分析应用中，某项任务的本质常常是解决问题，于是教师将在本门课程中充分渗透问题解决能力。此外，为了同时能让学生积极地应用所学知识，教师采用了 Problem-based Learning（基于问题的学习方法）。学生能够自主学习，在解决问题的过程中逐步提高他们对工程问题的理解，此外还可以增强他们的合作精神、沟通技巧。于是，本门课程共开展了 4 个案例，并辅以授课和课外辅导。

教师对课程内容和形式的反思：

■ **Reflection for improvement**

Students seem to need time and experience with the learning tasks before they can fully appreciate or grasp the relevancy or meaning of the intended learning outcomes. This suggests that the learning tasks were quite in line with the intended outcomes on the one hand, otherwise students would not have grasped the relevancy of the outcomes at all. On the other hand, this indicates that the present approach to explicating the intended outcomes by stating them in the subject description and assignment handouts is not adequate in promoting an understanding or appreciation of the outcomes. It may be necessary to provide more opportunities for active engagement with the outcomes at the briefing stage.

教师对案例报告及演讲的反思：

■ **Reflection for improvement**

Students asked for prompt feedback, ideally before the 'next' problem case so that they could improve.

教师对学生互评非技术性能力的反思：

■ **Reflection for improvement**

Students appreciated comments from peer and found it a potentially useful source of prompt feedback. They agreed that it could reflect their performance given that the ratings were genuine. This was true for some. Some others, however, expressed that they were reluctant to give low ratings to their peers, for sentimental reason and also because they were afraid that their peers could guess who gave the ratings. Some went for doing this 'collaboratively' so that by agreement, no one would receive really low rating.

To address this concern about anonymity, it is my intention to randomise the order of the peer raters appearing on the result page in addition to removing the name of each rater. (Students should be acknowledged of this mechanism to avoid any unnecessary misunderstanding.)
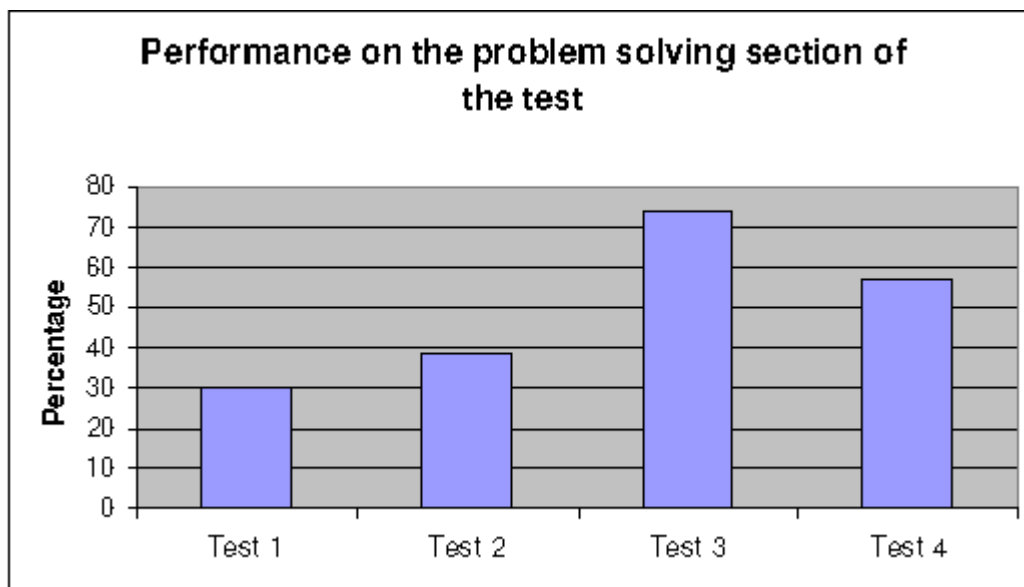
教师对阶段测验的反思：

课后的总结性评价

以"问题解决能力"为例：

问题解决能力是通过阶段性测验评价的,测验对应部分的分数直接反应了信息系统分析背景下的问题解决能力。阶段性测试分布在两个连续的学期中,每个学期有两次测验,于是有以下的 4 次测验结果。右下图看出,学生解决问题能力是在逐步提升的(除第三和第四次测验的下降)。

Performance on the problem solving section of the test

以"非技术性能力"为例：

在本课程开展过程（两学期）中,开展了两次问卷调查(一次在开头、一次在结尾)。问卷的问题包含对各非技术能力的表述,学生根据他们在案例中的表现进行评分。

学生的问题解决能力、沟通能力和人际交往能力都有提升。