ASSESSMENT AND FEEDBACK IN BUSINESS EDUCATION

Assessment is probably not a new concept for teaching staff at the university, as most of them would have gone through heavy testing and examination procedures before they can successfully become experts in their disciplines. However, many teachers who are new to university teaching are not aware of the highly significant impacts that assessment can have on the quality of student learning, even though they went through a similar pattern of assessment previously. Assessment has been commonly and wrongly viewed as merely the final outcome measure of students' skills and knowledge at the end of a course, providing an indication of students' level of competency – quite simply "a number to the name". But in reality, assessment reflects the overall effectiveness of teaching and learning. It guide students for appropriate approaches to learning, and guide teachers for appropriate teaching styles and activities. It is also an indicator for university quality assurance. In fact, assessment is the central element in the overall educational process of teaching and learning in higher education. However, teachers often treat the design of assessment as an add-on component to the curriculum design. Little or no thoughts are dedicated to the design of the assessment. Usually, only traditional summative assessments such as examination with essay and case study type of assessments are employed in business education.

For students, assessment basically defines the direction of their learning as it drives student learning. Consequently, it determines students' approach to study, and therefore indirectly determines the quality of their learning. Thus, teachers can make use of assessment as a strategic tool to direct their students to the appropriate studying approach in order to achieve the desired learning outcomes in their courses. Also, teachers always need to keep in mind the purpose of assessing when designing the assessment. Assessment should exhibit clear alignments with the intended learning outcomes, as well as the teaching and learning activities, which are considered altogether as the three core elements in the outcomes based approach of curriculum design in higher education. This is true not just for tests, assignments and exams, but also for business case studies, oral presentations and other types of assessment. **Thus, when designing the course, the three core elements – the Intended Learning Outcomes, the Teaching and Learning Activities and the Assessment – should be aligned constructively and designed interdependently and simultaneously.**

Good assessment practice should set clear expectations and give a reasonable workload (which does not force students into the mode of rote learning and regurgitation of memorized materials without genuine and deep understanding). Over-assessing is time-consuming for both teachers and students and may even have a counter-productive effect.

On one hand, assessment should place attention to outcomes and achievements of students (acting as a quality assurance mechanism to protect academic standards in the "summative" sense), and also emphasize the learning experiences of students that can lead to the desired learning outcomes (on-going development of skills and competency of students in the "formative" sense).

Assessment should be accompanied by timely and useful explanatory feedback that recognize students' achievement and at the same time provide appropriate suggestions for improvement. According to Diana Laurillard (2001), "Action without feedback is completely unproductive for a learner" (p. 55).

- **Clear goals and expectations** – Assessment works best when its goals and expectations are clearly explained to students. Students can study efficiently when they have a clear idea of a particular goal. It is important that the assessment methods are aligned with the course learning outcomes and teaching activities.

- **Transparency and clear standards** – Transparency in the marking and standards of assessment is important so that students understand how their grades are determined.

- **Validity** – Assessment should reliably measures the expected learning outcomes it is intended to measure, especially on the higher-order cognitive skills that students have acquired.

- **Discourages Rote-Learning** - If the assessment employed encourages rote learning, students will perceive that rote learning is what is valued by the teacher. As our knowledge about the world is expanding at an extremely rapid rate, it is impossible to constantly keep every piece of knowledge in our memory for instant retrieval. Assessment should therefore put greater emphasis on how students can identify and access relevant information when required, rather than their ability of keeping everything in the memory. This is echoed by AACSB, the accreditation body, "*while most (generic) skill areas are likely to remain consistently important over time, knowledge areas are likely to be more dynamic as theory and practice of business and management changes over time.*"

- **Avoids Plagiarism** - With carefully designed assessment, the likelihood of committing plagiarism can be reduced. Teachers can adopt assessment that require students to incorporate their original perspectives and creativity in their answers, such as personal reflection on social issues or writing critiques of Wall Street journal or Harvard business reviews, or applying or adopting a theory into a topical business challenge, instead of adopting the kind of assessment that encourage students to recite the perspectives of the others, such as asking for a description or summary of the theories from a particular economist.

- **Variety** – A variety of assessment methods in a course allows a wider range of learning outcomes to be assessed. Students will learn a wider range of knowledge and skills, and that will also keep them engaged with greater interest and motivation. Assessment should involve elements of both subject-specific knowledge and generic skills. As in nowadays, generic skills such as interpersonal and presentation skills, communication, and group work skills are increasingly being recognized and valued by employers, it is important to develop new assessment methods to validly assess these generic skills, which cannot be properly done by traditional assessment methods such as essays and exams.

Web Reference and Resources

- Advancing Quality Management Education Worldwide. (2013). Learning and Teaching Standards. Retrieved from http://www.aacsb.edu/accreditation/standards/2013-business/learning-and-teaching
- Assessment Resources@HKU. Retrieved from http://ar.cetl.hku.hk/index.php
- Centre for the Study of Higher Education, Australian Universities Teaching Committee. (2002). Tips for new staff: Basic advice for people new to university teaching. Retrieved from http://www.cshe.unimelb.edu.au/assessinglearning/07/index.html
- Centre for the Study of Higher Education, Australian Universities Teaching Committee. (2002). Core principles of effective assessment. Retrieved from http://www.cshe.unimelb.edu.au/assessinglearning/05/index.html
- Laurillard, D. (2001). Rethinking University Teaching (2nd ed.). Routledge Falmer.
- TeacherVision. (2005). Assessment vs. Evaluation. Retrieved from http://www.teachervision.fen.com/assessment/new-teacher/48353.html

GOOD CASES ON ASSESSMENT & FEEDBACK IN BUSINESS EDUCATION

CASE STUDY 1
USING FEEDBACK TO PROMOTE STUDENT REFLECTION AND LEARNING

Assessment Method	Written assignment & Reflective writing
Course Year	Undergraduate, Year 2 & 3
Discipline	Business - General

Rationale

To engage students and capture their reflection on their feedback.

How it was done

- On the return of their written assignment of a business related course, students were given a self-copying sheet (i.e. carbonless paper) containing the following three questions:
  - How do I feel about this feedback?
  - What do I think about this feedback?
  - Based on this feedback what actions could I take to improve my work for another assignment?
- Students were asked to read the written feedback, reflect on it and fill in the self-copying sheet.
- They then tore off the top copy of the self-copying sheet to hand in to the teacher, while the bottom copy was retained by the students so that they could build up a bank of their own learning reflections.

Benefits

- Capture students' reflection on their feedback in a process structured manner and enables them to feed forward their prior learning to future assignments.
- Encourage students to be more actively involved in monitoring their own progress.

Challenges

Some students may not possess the thinking skills to reflect on their feedback and progress forward, thus, teachers should provide opportunities for practices.

Student response

- Students were enthusiastic to be involved in the feedback system.
- Students became better in self-reflection with each question; responses varied from a simple emoticon (for the first question) to short paragraphs for the later questions. Most students were able to identify specify action item(s) to improve their future work.

How to further enhance the case?

Can add in a few more reflective questions to

encourage additional student's learning from the received feedbacks, such as:

- How did the feedback help you understand your own learning strength and weaknesses?
- Did the feedback help you to improve as a business student? Etc.

Contact details

Dr. Sarah Quinton, Oxford Brookes University, email: sequinton@brookes.ac.uk

Reference

Quinton, S., & Smallbone, T. (2010). Feeding forward: Using feedback to promote student reflection and learning – a teaching model. *Innovations in Education and Teaching International, 47*(1), 125-135.

CASE STUDY 2
ONLINE DATABASE OF ASSIGNMENT EXEMPLARS

Assessment Method	Business Report
Course Year	Undergraduate, Year 2
Discipline	Business - General

Rationale

To provide a database of exemplars to help students understand the assessment criteria.

How it was done

- In the course "Methods of Enquiry", students were asked to work in pairs to write a 1700 word report on a topical business problem.
- A database of exemplars – marked student's assignments of previous cohort made anonymous with annotated feedbacks from the teacher – was made available to students on the university's online learning platform (WebCT).
- Students were encouraged to refer to the exemplars in preparing their assignment; also, an online discussion area was created to allow students to discuss and inquire about the exemplars, assessment criteria, their own assignment, and obtain feedback from the teacher.

Benefits

Exemplars can enhance students' engagement, as they are given the opportunity to learn from the feedback given to previous students while preparing their own assignments.

Challenges

- Students may need help in identifying the expected qualities of a piece of good assignment in an exemplar through meaningful dialogues with their teachers and/or peers.

- Real assignments can be complex, so they may not be the best exemplars. Rather, exemplars constructed by the teacher may be more effective in illustrating expectations.
- Some students may treat the exemplars as reading materials, reading them without reflection.

Student response

Students found the exemplars very useful as they gave them a good idea of the teacher's expectation of a good assignment.

How to further enhance the case?

- Encourage students to be more active in online discussion by giving credits for participation.
- Can add in peer assessment elements, such as asking students to give feedback on the exemplars, or encourage students to post the 1st draft of their written assignment online for other students to comment.
- Some "Points to Ponder" can be given on the exemplars with prompt student reflection, such as "What does the feedback mean?" and "How can the feedback be acted upon?"

Contact details

Dr. Karen Handley, Oxford Brookes University, email: khandley@brookes.ac.uk

Reference

Handley, K., & Williams, L. (2011). From copying to learning: Using exemplars to engage students with assessment criteria and feedback. *Assessment & Evaluation in Higher Education, 36*(1), 95-108.

CASE STUDY 3
AUDIO FEEDBACK

Assessment Method	Written assignment
Course Year	Undergraduate
Discipline	Business - Economics

Rationale

To provide fast, efficient, and effective feedback through digital voice files.

How it was done

- In an "Intermediate Microeconomics" module, students were assigned to produce a written paper of 2,000 words on an economic issue or problem, which were later marked and graded by the teacher.
- Feedback comments were emailed to the students in audio recordings (5 minutes long in average) produced in an MP3 voice file.
- The feedback comments were made in relation to the assessment criteria sheet which had been distributed to the students earlier as a grading guideline.

Benefits
- The use of voice files is more effective in providing detailed, individualized, and more direct feedback to the students compared to written feedback.
- For the teachers, the workload to produce the feedback voice files is much lower than producing written feedback in large quantities.

Challenges
If no guideline is prepared beforehand, it may be easy for the teacher to drift away from the focus of feedback when recording the audio file.

Student response
- Student evaluations recorded high student satisfaction with the quality and usefulness of feedback provided in this audio format.
- Students appreciated the personalized audio feedback and found them more comprehensive compared to written comments.

How to further enhance the case?
Preparation of a guideline for teachers with areas to be covered (e.g. structure of paper, grammar) prior to recording the audio feedback can help to improve consistency.

Contact details
Dr. David Laughton, Sheffield Hallam University, email: d.j.laughton@shu.ac.uk

Reference
Laughton, D. (2012). *Using voice files to provide feedback to students on assessed work - An evaluation of efficiency and effectiveness perspectives*. Paper presented at 19th EDINEB Conference May 2012.

📝 CASE STUDY 4
INTERIM PRESENTATION AND BI-WEEKLY DISCUSSION FOR ASSESSMENT AND FEEDBACK

Assessment Method	Presentation & Report
Course Year	Undergraduate, Year 2
Discipline	Business - Information Systems

Rationale
To provide an opportunity for students to present their work-in-progress, so that they can receive feedback from their peers and instructors on areas for improvement.

How it was done
- In a Information Systems Project Management course, the students were asked to work on a group project to design and implement an information system for an identified business problem; the project output can be in the form of a database, a web application or a mobile application.

- Assessment of the group project involved group assessment (40%) and individual assessment (40%).
- For group assessment, students had to do 3 presentations: one proposal presentation, one interim presentation and one final presentation. They were also required to submit a project report at the end of the semester.
- For individual assessment, each student had to submit an individual reflection report and a peer evaluation form.
- Bi-weekly discussion sessions were conducted with each group to provide feedback and suggestions.
- Written (electronic) feedback was also given if students email their questions to the lecturer.
- Feedback for the presentations would be given orally on the spot and via email.

Benefits
- In information systems (IS) project management, there is often a need for improvement after developing a system when the client or the user is not satisfied with it. The interim presentation reflects such real-life situation, providing an opportunity for students to present their prototype and to receive feedback from their peers and instructor on areas for improvement. Similarly, the bi-weekly meetings also provide opportunities for the instructor to give formative feedback to students.
- Peer evaluation helps to address the problem of free-riders.

Challenges
- Through looking at the self-reflection report or peer evaluation, it was still difficult to see precisely how much effort students put in, unless the instructor sits down with the students and gets involved throughout their working process.
- Due to team spirit, students may not evaluate their peers too negatively in the peer evaluations.

How to further enhance the case?
Transparency of the assessment can be improved by creating a rubric for peer evaluation.

Contact details
Dr. Michael Chau, The University of Hong Kong, email: mchau@business.hku.hk

Reference
Chau, M. (2015). Interim presentation and bi-weekly discussion for assessment and feedback. Retrieved from http://ar.cetl.hku.hk/load_article.php?id=727

CASE STUDY 5
ASSESSMENT AND FEEDBACK THROUGH IN-CLASS PARTICIPATION

Assessment Method	In-class participation
Course Year	Undergraduate, Year 2
Discipline	Business - Operation Management

Rationale

To encourage active participation in class.

How it was done

- Student's personal information was collected on a name card at the start of an Operation and Quality Management course (see Figure 1 below).
- During classes, students were called upon to answer questions and they were graded based on their attendance and the quality of their answers.
  - If a student who was called upon was absent, he/she would get a low participation grade on that particular day.
  - If a student volunteered or was called upon, the lecturer would listen to his/her answer and then give him/her a grade from A to C behind his/her name card.
  - A more detailed grade would be given later. For instance, if the teacher thought that a student is an 'A' student for that day's participation, whether he/she would get an 'A+', 'A' or 'A-' would depend on how impressive the teacher felt about the quality of his/her answer or the question he/she asked.
- Towards the end of the course, the grades would be translated into marks based on the number of times the students participated as well as the quality of his/her questions/answers. 10% of the course grading has been allocated for in-class participation.

Figure 1. Name card

Photo of student	Full Name	English or Preferred Name (what do your friends call you?)
	Subclass	
	Major	Year
	Something interesting about yourself:	
	What do you expect to take away from this course?	

Benefits

- As there are a lot of opportunities for students to participate in class, there are also plenty of opportunities for the teacher to give immediate feedback following the responses from students.
- Motivate students to attend classes.

Challenges

- Although this type of pedagogy works well with a small class size, it is questionable whether the teacher will be able to get the same amount of attention in a large class.
- A certain degree of subjectivity in the teacher's judgment of the quality of answer from the students.

Recommendations

Can further encourage in-class participations between students by giving students credits for answering a question asked by another student, and/or following up on other student's answer towards the teacher's questions.

Contact details

Dr. Hsiao-Hui Lee, The University of Hong Kong, email: hhlee@hku.hk

Reference

Lee, H.H. (2015). 'X-PULT' project & in-class participation facilitated by a 'name card'. Retrieved from http://ar.cetl.hku.hk/load_article.php?id=730

CASE STUDY 6
"EARLYBIRD" FEEDBACK SCHEME

Assessment Method	Written assignment
Course Year	Undergraduate, Year 2
Discipline	Business - Management

Rationale

To promote assignment revision through the provision of formative feedback.

How it was done

- In a business school course "Organizational Behavior", students were asked to submit a draft of a literature review assignment two weeks before the final submission.
- Detail and in-depth feedback were given by the teacher, which was written directly on the draft of the literature review.
- The assignments were then returned to the student so they can improve on the assignment before final submission.

Benefits

- Encourages early assignment writing and revision.
- Providing feedback on students' work before final submission allows students to understand the mistakes made when they still care.

Challenges

- Time consuming for teacher to provide individual feedback.
- As the scheme is voluntary, student's participation varies.

- Cannot guarantee students will revise according to the feedbacks received.

Student response
- Students who participated in the scheme had a better final grade than those who did not.
- Students indicated in a self-report questionnaire that they found the scheme and the feedback useful, and believe that their work improved to a certain extent.
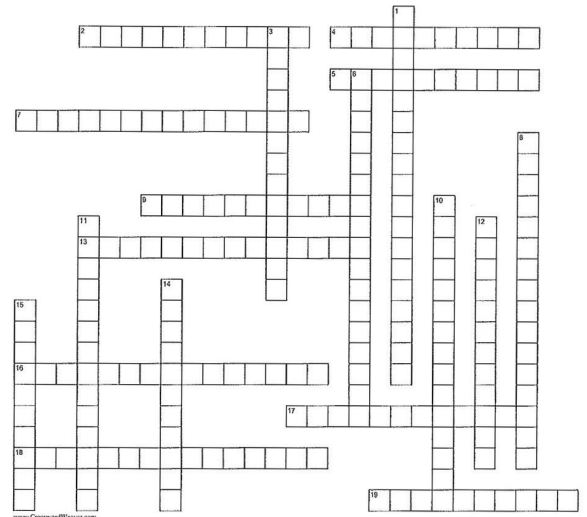
How to further enhance the case?
Can provide students some assignment exemplars of literature reviews so they have an idea on the assessment requirement and criteria.

Contact details
Prof. Kerrie Unsworth, The University of Western Australia, email: kerrie.unsworth@uwa.edu.au

Reference
Unsworth, K., & Kauter, K. (2008). Evaluating an earlybird scheme: Encouraging early assignment writing and revising. *Higher Education Research & Development, 27*(1), 69-76.

CASE STUDY 7
USING CROSSWORD PUZZLE TO ACCELERATE STUDENT LEARNING

Assessment Method	Pop-up quiz
Course Year	Undergraduate
Discipline	Business - Economics

Rationale
To assist students in learning basic economic vocabulary and terminology through crossword puzzle exercises.

How it was done
- Two weeks before the end of the semester, the students of an introductory microeconomics class were given a crossword puzzle containing microeconomic terms and phrases extracted from the course textbook, which they were asked to complete and submit to the instructor.
- In a later in-class pop-up quiz, the students were given 40 minutes to prepare with their crossword puzzle handouts.
- After the quiz, the students completed a crossword assessment survey (Berry & Miller, 2008) to assess their perceptions on the crossword puzzle experience.

ACROSS

2 two goods for which an increase in the price of one leads to an increase in the demand for the other.
4 (2 words) costs that do not vary with the quantity of output produced.
5 (2 words) a good for which an increase in the price raises the quantity demanded.
7 (2 words) total revenue minus total cost,.
9 (2 words) a graph of the relationship between the price of a good and the quantity demanded.
13 (2 words) the quantity of output that minimizes average total cost.
16 (2 words) the increase in output that arises from an additional unit of input.

17 (2 words) a good for which, other things equal, an increase in income leads to a decrease in demand.
18 (2 words) whatever must be given up to obtain some item.
19 a measure of the responsiveness of quantity demanded or quantity supplied to one of its determinants.

DOWN

1 (2 words) two goods with right-angle indifference curves.
3 (2 words) input costs that require an outlay of money by the firm.
6 (2 words) a curve that shows consumption bundles that give the consumer the same level of satisfaction.

8 (2 words) the amount of a good that buyers are willing and able to purchase.
10 (2 words) a buyer's willingness to pay minus the amount the buyer actually pays.
11 (2 words) the fall in total surplus that results from a market distortion.
12 (2 words) the increase in total cost that arises from an extra unit of production.
14 two goods for which an increase in the price of one leads to a decrease in the demand for the other.
15 (2 words) a good for which, other things equal,an increase in income leads to an increase in demand.

Benefits
- A fun and quick way to foster an understanding of new terms and vocabularies.
- Great flexibility in applying to other disciplines.
- An effective learning tool for large classes.

Challenges
Some students might not find the puzzle interesting, possibly due to the lack of challenges as it only assess low-level cognitive skills.

Student response
- The crossword puzzle helped students build and maintain a bank of introductory microeconomics vocabularies.
- Students found the puzzle effective as a learning tool in recalling definitions and terms, and experienced an improvement in their quiz grades.

How to further enhance the case?
To make the puzzle more fun and challenging, the teacher can set a time limit, make it more competitive between students, or use different ways to credit participation.

Contact details
Dr. Tin-Chun Lin, Indiana University-Northwest, email: tinlin@iun.edu

Reference
Lin, T. C. & Dunphy S. M. (2013). Using the crossword puzzle exercise in introductory microeconomics to accelerate business student learning. *Journal of Education for Business, 88,* 88-93.