

Leading University Education Policy in China

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Abstract

Outcomes-based teaching and learning and criterion-referenced assessment have been implemented in many universities in Hong Kong. Recently these were adopted by a university in China. This paper is based on a qualitative research to explore if the policy implementation is producing the desirable results for the students and the lecturer, and to assess the learning outcomes with respect to Bloom's Taxonomy. The exploratory results indicate that the policy implementation generated positive impact to students' learning outcomes.

Keywords: Bloom's Taxonomy, criterion-referenced assessment, education policy, learning outcomes, outcomes-based teaching and learning.

Introduction

Outcomes-based teaching and learning (OBTL) teaching methodology has been applied internationally in different educational settings such as primary, secondary and tertiary institutes. Its inception can be traced back more than a decade ago (Chu, Fong and Tan, 2000). Criterion-referenced assessment (CRA) is designed to measure how well a student has learned a specific domain of knowledge and skills (Kotter, 1965). It is a set of assessment guidelines or detailed criteria for every course assessment component or task and it is to align with the OBTL teaching methodology. OBTL and CRA are widely adopted by universities in Hong Kong.

Literature review

Last year these were adopted by a university in China. Therefore it is worthwhile to study the perspectives of teachers and students with respect to the implementation of OBTL and CRA. The objective of this study is to evaluate the learning outcomes with respect to Bloom's Taxonomy.

The university management in its meeting in July 2013 resolved to fully implement CRA to all courses for the undergraduate programs offered in the academic year 2013-14. This was an important change in the assessment methodology as compared with that was used in the past. The CRA policy, guidelines, and procedures applicable to all courses were distributed to all staff and they were urged to read the documents carefully to understand the requirements and procedures in the implementation of CRA for the courses taught by them in the academic year 2013-14. Any change requires creating a new policy and demands leadership that should have a sense of urgency and good communication skills for the policy implementation as asserted by George, Ries and Steven (2005).

For CRA, assessment guidelines or detailed criteria should be set for every course assessment component or task. The assessment criteria are normally designed and presented in a form of “rubric” to provide a set of clear and consistent guidelines for the instructor’s assessment of individual course task or activity such as class participation, case study, coursework assignment, group presentation, test and etc. The word “rubric” is to denote a type of matrix that provides scaled levels of achievements (Allen and Tanner, 2006). CRA assessment guidelines must be aligned to the Course Intended Learning Outcomes (CILOs).

The diagram below shows the theoretical framework of the inputs, activities and outcomes, and Figure 1 is based on the Logic Model Development Guide (Kellogg Foundation, 2004). There are three main stakeholders namely university management, lecturers and students influencing outcomes of the CRA Program implementation.

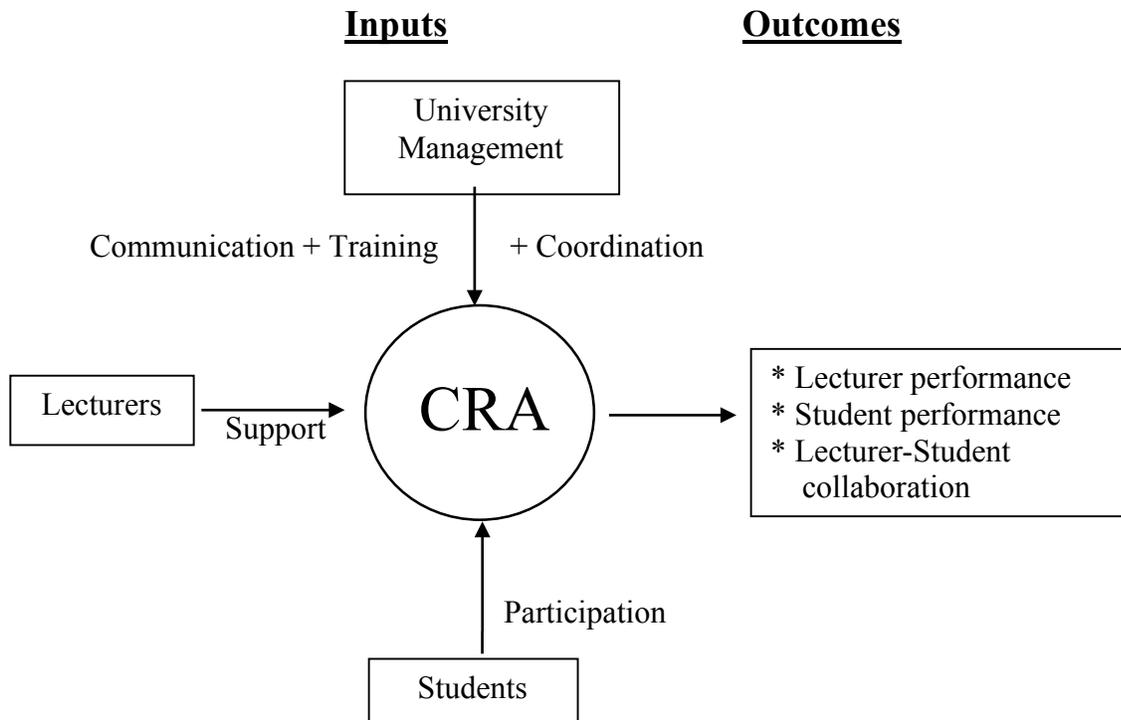


Figure 1. Theoretical framework of inputs and outcomes

Generally speaking, the teaching team member had the impression that the implementation of the CRA program was quite effective. There were four key factors that would have contributed to the effectiveness as follows:

Communication

The university completed the update of the OBTL syllabuses for the use of CRA for the courses offered in the first semester, 2013-14. All teaching teams should use the new OBTL syllabus in teaching and in implementing CRA. Each course OBTL syllabus was uploaded at the intranet website. All subject teams should distribute the subject OBTL syllabus and the subject 14-week teaching plan with detailed assessment methods and brief assessment guidelines for each assessment component to students in the first week of the new semester. A set of sample rubrics for various forms of assessment had been prepared and uploaded in the intranet website for reference and use by the course team members in developing the rubrics for their courses.

Training

Some of the rubrics were used in the pilot run in 2012, and all staff could read the training workshop Power Points for some illustrations on the design of the rubrics. Moreover, a workshop for all new staff was conducted in September 2013 to help them get familiar with the system.

Guidelines

For the full implementation of CRA to all undergraduate programs, guidelines were communicated to all staff. CRA assessment should apply to selected assessment components. The assessment guidelines and rubrics of the selected CRA assessment components were made available to students within the first two weeks of classes. These components include how the particular assessment task to be aligned with the CILOs, the assessment criteria and standards which must be based on the CILOs, and any submission procedures and deadlines, including penalty for late submission. The course lecturer should distribute the assessment rubrics to students well before the assessment task commencement.

The work submitted by students for formative assessment tasks should be marked/graded and returned to the students with constructive feedback as soon as practicable and in any case, preferably no later than three weeks after the deadline for submission. The final grades and their distribution of students' assessment would be subject to internal moderation. Moderation would take the form of double, cross or random marking, and seeking external advice.

Coordination

In pursuant to the university policy, a CRA Implementation Monitoring Group was set up to ensure the smooth implementation of the CRA in the academic year. The group composition included the Dean, all the Program Directors and the CRA Coordinator. A CRA Implementation Time Schedule for Semester 1 was developed and distributed for action by all staff. The feedback and suggestions from the staff on the CRA implementation would be conveyed to the group.

Methodology

A qualitative research was conducted in the end of 2013 at a university in China and it is near Hong Kong. There were two parts for the study. First, there was an evaluation of the perspectives

of the lecturers and students. Second, the achievements of learning outcomes were assessed with reference to two classes of year 4 students. Their learning outcomes were classified according to Bloom's Taxonomy.

The purpose of Bloom's Taxonomy is to distinguish between memorized knowledge and intellectual activities. It is to differentiate learning and offers a framework to organize classroom activities to achieve educational goals, and is divided into distinctive categories, each building on the previous item. The different levels of Bloom's Taxonomy are in the sequence of knowledge, comprehension, application, analysis, synthesis, and evaluation (Brazelton, 2000).

For the first part of this exploratory study, perspectives of the lecturer and two classes of final year students taking a course of Strategic Management in the last quarter of 2014 were reviewed. In view of the implementation of CRA for a course of Strategic Management at the university in China, the problem definition would comprise multiple functions (Bardach, 2000).

For the second part of the study, observations were conducted at one class of year 1 and another class of year 3 students with respect to what they were doing and what were the instructional tasks.

Natural sampling was adopted for both parts of the study because only a particular lecturer and classes of students were available at the time of study (Hussey and Hussey, 1997).

Findings and Discussion

For the first part of the study, there were three benefits reported by a lecturer in a division meeting with the Dean. First, the lecturer would have regular monitoring on the progress of each student, and based on the student progress, special tutorial sessions or meetings were arranged to help the student improve ways of studying.

Second, at the end of the semester in December 2013, all students performed well and were all above the grade of pass. Finally, feedback by the students on the lecturer performance was very good, with an average of 4.35, very close to the top scale of 5 being excellent, based on 18 questions on teaching and learning evaluation.

In assessing the program of CRA, some assumptions were made. First, the close communication between the lecturer and students should be improved by checking with students at the middle of the semester concerning their progress and areas for improvement by conducting a teaching and learning evaluation at the middle of each semester in addition to the one at the end. Second, full support of the lecturer would be critical for the successful implementation of the program. In many review meetings, some improvements in future were suggested by the teaching team member. It would be desirable to monitor more tightly the implementation, with regular review increased from one review at the end of each semester to two reviews. In addition to the Program Directors, each Course Convener could be given the responsibility to closely monitor the progress for each course.

For the second part of the study, observations of the teacher and students in two classes of year 1 and year 3 students were conducted at the university in China. One class comprised 49 students

of Year 1 taking the course of “Entrepreneurship” and the other class comprised 35 students of Year 3 taking the course of “Marketing “. What the students and lecturer were doing is summarized as follows:

Year 1

The class lasted for 50 minutes in the morning of February 21, 2014. During this period, the students watched the Power Point slides with reference to chapter 2 on “From Ideas to Reality” of the textbook, and listened to a lecture for about 35 minutes. They were enthusiastic in listening and watching the Power Point slides, and then answered a few open-ended questions raised by the lecturer. After watching a video on Steve Jobs talking about innovation and entrepreneurship for about 4 minutes, the students were asked to list the key words spoken by Steve Jobs and prompted to link up the key words to summarize the profile of an entrepreneur. They were able to achieve the level 1 and 2 of knowledge and comprehension respectively of Bloom’s Taxonomy. The lecturer told a story of how the German Army recruited pianists to be trained as pilots during the World War II. The students were prompted to assert the rationale behind as the skills are related to each other. This indicated their achieving higher level 6 of Bloom’s Taxonomy. The condensed version of the taxonomy of educational objectives is within a hierarchical framework (Bloom, 1971). But the students achieved various levels in the same class. At the end of the lecture, the lecturer announced that a mid-term examination would be conducted on March 26, 2014 and reminded the students to form triad groups by weekend with each group comprising 3 members with one student elected as a group leader.

Year 3

The class lasted for 50 minutes in the afternoon of February 21, 2014. After watching the video of Bill Gates, the students were able to list down the key words mentioned by Bill Gates with respect to tips for students, and then summarize the theme of the video, demonstrating their knowledge and comprehension at level 1 and 2 respectively with respect to Bloom’s Taxonomy. When the lecturer asked about an open-ended question on a concept in the chapter, they were able to compare 60% existing business was more important than 40% new business, indicating their skill of comparing two different perspectives, achieving level 6 of Bloom’s Taxonomy. After watching the video, they listened to a lecture and watched the Power Point slides with reference to chapter 2 on “Developing Marketing Strategies and a Marketing Plan” of the textbook. They were enthusiastic in listening and watching the Power Point slides, and asked some questions with respect to the various concepts covered in the lecture. At the end of the lecture, the lecturer announced that a mid-term examination would be held on March 27, 2014. The lecturer also reminded the students to form triad groups by the end of the week.

From the above observations, students in both classes were able to achieve level 1, 2, and 6 of Bloom’s Taxonomy. It indicates that Bloom’s Taxonomy is not in sequential hierarchy. The learning outcomes and classification under the Bloom’s Taxonomy are summarized in the table below:

Table I. Learning outcomes and levels of Bloom's Taxonomy

	Learning outcomes	Bloom's Taxonomy
Year 1	List key words in a video	Level 1: Knowledge
	Summarize the theme	Level 2: Comprehension
	Compare skills of pianists and pilots	Level 6: Evaluation
Year 3	List key words in a video	Level 1: Knowledge
	Summarize the theme	Level 2: Comprehension
	Compare new business and existing business	Level 6: Evaluation

Conclusion

Based on the exploratory qualitative survey, the findings indicate that the CRA policy is effective in helping students to achieve the course intended learning outcomes but Bloom's Taxonomy is not sequential hierarchy based on the students' achieving different levels of the taxonomy in the same class.

The limitation of this study is due to its small scope of qualitative research with only a few classes of students selected. For future study, a larger scale of quantitative research may be conducted by selecting more classes to assess if the different levels of students' attainment of learning outcomes at the end of semester compared with the beginning of the semester. Another opportunity in future is to extend the research to other universities in China for comparison purposes.

References

1. Allen, D. & Tanner, K. (2006). Rubrics: Tools for Making Learning Goals and Evaluation Criteria Explicit for Both Teachers and Learners. *Life Sciences Education*, Fall, p.187-203.
2. Bardach, E. (2000). *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving*. New York: Chatham House.
3. Bloom, B. S. (1971). *Handbook on Formative and Summative Evaluation of Student Learning*. New York: McGraw-Hill.
4. Brazelton, J.K. (2000). Students may blossom using Bloom's Taxonomy in the Accounting Curriculum. *Advances in Accounting Education*, vol. 2, p.57-68.
5. Chu, S., Fong, N. and Tan, S.Y. (2000). *Applying outcomes-based teaching and learning framework in the B.Sc. Information Management Program in the Faculty of Education*. Paper presented at Enhancing Learning Experiences in Higher Education International Conference, Hong Kong, December 2000. Available at: <http://www.cetl.hku.hk/conference2010/pdf/Chu.pdf> [Assessed 1 June 2014].
6. George, B., Ries, R. and Steven, L. (2005). *Criterion-Referenced Assessment*, Thousand Oakes, CA: Sage, p.133-136.
7. Hussey, J. and Hussey, R. (1997). *Business Research*. London: McMillan, p.146-147.
8. Kotter, J. (1965). Leading Change: Why Transformation Efforts Fail. *Harvard Business Review*, March-April, p.59-67.
9. W.K. Kellogg Foundation, (2004). *Logic Model Development Guide*, MI: Battle Creek, p.1-4.