Reforming Teacher Education through Outcome-based Learning: What Are the Factors Affecting Implementation?

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Introduction

- Since the launching of outcome-based learning (OBL) in higher education in Hong Kong, institutional reforms are evident and have aroused various concerns of the stakeholders.
- The major elements of OBL, identified as the intended learning outcomes, teaching and learning activities and assessments are assumed to be the areas of change in the curriculum context.
- This paper reports the findings of the implementation in teacher education courses in the Department of Curriculum and Instruction.

Aim of study

- To identify factors that contribute to the degree of success in the actual implementation of OBL and to reflect on the current state of implementation in higher education in Hong Kong.

The cores of OBL

- Objective – what we (teachers and students) expect (participants) to learn from the courses
- Teaching and learning process – how we make it through a range of learning experiences
- Outcome – what students have achieved and how do we know?

Outcome-based Learning (OBL): A conceptualization of curriculum

- A focus on the objectives and outcomes of courses
- An emphasis on active learning rather than passive receiving
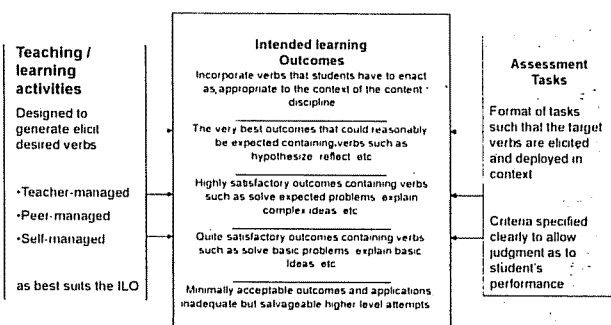- Articulating and ensuring student outcomes

What are the theories underpinning

Behaviorism
- Behavioral objectives
- Competency based approaches to curriculum and assessment
- Attainments and performances
- Mastery level of learning

Constructivist
- Student-centered
- Learning and teaching process
- Students' active role in learning
- Teachers as facilitator

Conceptual ideas of outcomes

- Traditional – base on an existing curriculum content and structure (lessons, units, courses and subject areas) form the starting point. The outcomes are often limited to individual units / topics / courses and are subordinate to existing curricula.

- Transitional – generate exit outcomes that required students to demonstrate and guide the curriculum programme decisions.

- Transformational – focus on "big" exit outcomes for learners for identifying the knowledge, competence and orientations of life.

The application of OBL to higher educationThe "Constructive Alignment Model" (Biggs, 2009)

Teaching / learning activities	Intended learning Outcomes	Assessment Tasks
Designed to generate elicit desired verbs	Incorporate verbs that students have to enact as appropriate to the context of the content discipline	Format of tasks such that the target verbs are elicited and deployed in context
•Teacher-managed •Peer-managed •Self-managed	The very best outcomes that could reasonably be expected containing verbs such as hypothesize reflect etc	
	Highly satisfactory outcomes containing verbs such as solve expected problems explain complex ideas etc	Criteria specified clearly to allow judgment as to student's performance
as best suits the ILO	Quite satisfactory outcomes containing verbs such as solve basic problems explain basic ideas etc	
	Minimally acceptable outcomes and applications inadequate but salvageable higher level attempts	

Methods

- Documentary evidence - class tutors in the selected courses were invited to attend the planning meeting to discuss about the OBL course design. The course designs, outlines and plans formed the evidence.

- Interview – interviews were conducted with the individual tutors and students in each course.

- Questionnaire – Students were asked to fill in the questionnaires about their experiences with the objectives, teaching and learning activities and assignment tasks of the courses.

Findings

1. At the planning stage

- Difficulties experienced by the tutors in transforming the existing curriculum :

"The most difficult thing is that the course is already written and implemented for quite a long time…Moreover, I am only responsible for teaching two classes out of five. It is really difficult to rewrite the intended learning outcomes freely (for the whole course without changing the other classes)."

(Tutor Y, interview)

- OBL design was inappropriate for long term objectives that were not measurable:

"I found that OBL design might not fit well with some learning objectives such as policy analysis. It actually needs a critical mind which is not expected to be attained through a course teaching, not even a year course's training."

(Tutor L, interview)

- An open mindset to a new approach is important:

" At the beginning, I don't believe in OBL because it is mentioned in the literature that OBL actually narrows learning objectives and there are quite a lot of things that cannot be written as objectives. However, I have changed my mind as I attended colleagues' sharing on OBL sharing sessions. Although I do not totally change my mind, I do think that OBL is not that bad."

(Tutor L, interview)

2. The implementation of OBL

- The OBL design is good but...

"OBL really helps. It's clear and because of the backward design, you may decide what you want for students' learning...However, the process (of implementation) is quite difficult. It is because the process involves students. Some of the students may have their own learning habits that may not match well with the OBL plans."
(Tutor L, interview)

- To communicate the objectives to the students is important

"I think students should know very well about what they need to learn beforehand. But in this course, I regret that I didn't communicate very well to my students and they eventually were not quite aware of these objectives..."

(Tutor C, interview)

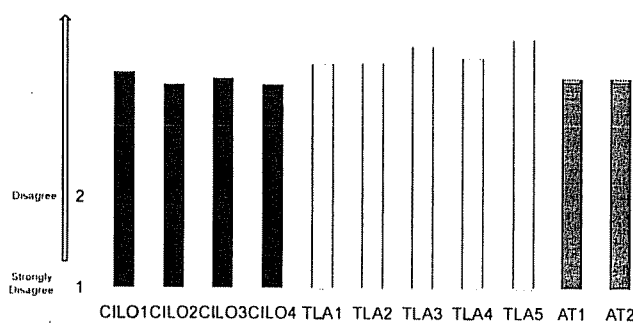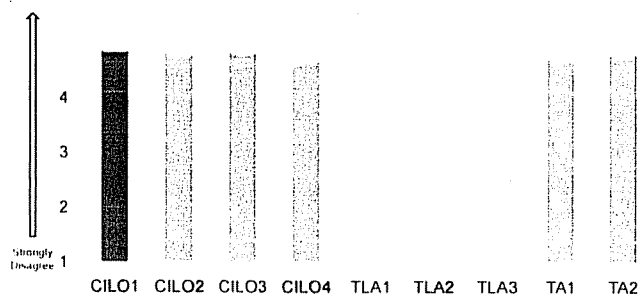- Student characteristic is an important factor

"Most of my students are in-service primary teachers but some of them are without teaching experiences. To those who have no teaching experiences, it is difficult for them to understand the teaching theories..."
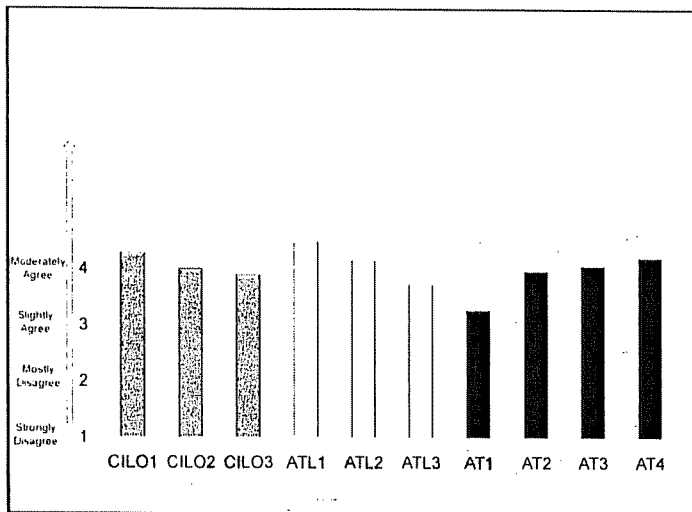
(Tutor L, interview)

- The need for a collaborative teaching culture

"It's the culture that matters. Although most of us have experienced OBL, I felt motivated when colleagues and I worked closely together. It would be better if team members could teach the same course with me and develop the teaching altogether...
(Tutor N, interview)

Slide 1

Bar chart with y-axis labeled: Moderately Agree (4), Slightly Agree (3), Mostly Disagree (2), Strongly Disagree (1). X-axis categories: CILO1, CILO2, CILO3, ATL1, ATL2, ATL3, AT1, AT2, AT3, AT4.

Student Feedbacks (course A)

- S3: The instructor requested us to design how to improve the learning and teaching by the model of small class teaching and cooperated learning. Those things happened in our daily life. They are useful. I can apply them in my school.

- S5: The assignment gave us a chance to get familiar with our school. (The instructor) asked us to write an essay on the improvement made in our school. It's something practical for us in how to put the theory into practice. I think it's good.

Student Feedbacks (Course B1)

Student of Class X:

The idea of allowing the students to do the presentation is good. (The instructor) hoped that we can get first hand information on presentation so that we could learn better....This is good, but the fact is that students could not adapt to it. Moreover, some students maybe lazy...I just presented in a way that is exactly the same written in the book. I simply used the PowerPoint to do the presentation... The next presentations were not so serious at all. It's because everyone thought that they could read the books all by themselves and thus felt unnecessary to attend to the presentations. I thought instructor's advice and our sharing were important and more important than the presentations.

Student Feedbacks (Course B2)

Student of Class Y:

The teaching materials were clear and concise. They contained many relevant Information. They were useful for the assignment...For the group discussion, usually we formed group of two and did the presentation after the discussion. The discussions were quite good. I could learn a lot from others.

There were many video played during the lessons. I thought they were good. They were relevant for our learning and we learnt a lot.

There were games such as the incentive scheme. We got prizes when we answered. The games caused great excitement to us even though we were undergraduate students. We were deeply impressed by these activities.

Student Feedbacks (Course C)

Students were concerned about the tests:

Although they (the tests) used open-book exams, we felt the pressure. As we all knew that tests would be counted, we all wished to perform well. As I did not have a good grasp of my subject knowledge, I could not find the answer for the paper even though I had searched through the books...When I finished the tests, I had almost forgotten all the contents. I didn't think it's the ultimate aim of the test.

Factors affecting OBL implementation

- Understanding of the approach by both the teachers and students is equally important
- Tutors' mindset for change can make a difference
- Students' characteristics / backgrounds would have strong input in the course design
- A collaborative teaching culture help clarify the uncertainties
- Support from the work unit can help

Implications

- Starting from 2012, the new cohort of the New Secondary School graduates who will enter HK's higher education will be quite different from those of the Form 7 graduates in learning backgrounds and the university teachers have to be alert of this and redesign their courses.

- University teachers will have to take considerable flexible measures in the objectives, teaching & learning, and assessment design in alignment with student needs & learning outcomes.

- The design of assignments reflects a wide range of students' learning outcomes and the university teacher will have to map out the course outcomes with those of the universities.

- University teachers might have to work in collaborative teams to design and implement new learning for the new graduates. How could this be done effectively will depend on teachers' interactions and departmental cultures.

Thank you very much!