

Scales Presentation

Evaluation of BL Project Outcomes

- I. Student pre- & post-course questionnaires
- II. Teachers guided reflection sheet
- III. Teachers overall coordinating evaluation

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(I) Student pre- & post-course questionnaire

- Demographic Data:

Name, Student no., Program, Year, Major & Minor, Gender and Age.

- Tutor-based items

- Subscales:

- | | |
|---------------------------------------|----------------------------------|
| 1. Extrinsic Motivation | 7. Behavioral Engagement |
| 2. Motivation: Introjected Regulation | 8. Cognitive Engagement |
| 3. Motivation: Identified Regulation | 9. Emotional Engagement |
| 4. Intrinsic Motivation | 10. Positive and Negative Affect |
| 5. Blended Learning Enthusiasm | 11. Before Class Emotion |
| 6. Learning Method Preference | 12. During Class Emotion |
| | 13. After Class Emotion |

Lam & Cheng (2014); Pekrun, Goetz, & Perry (2005); Skinner, Kindermann, & Furrer (2009); Thompson (2007).

Overall view of subscales modification

Subscales	# Previous scale		Current scale	
	Pre-test	Post-test	Pre-test	Post-test
Extrinsic Motivation	3 items	3 items	3 items (Q3)	3 items (Q3)
Motivation: Introjected Regulation	2 items	2 items	3 items (Q3)	3 items (Q3)
Motivation: Identified Regulation	3 items	3 items	3 items (Q3)	3 items (Q3)
Intrinsic Motivation	3 items	3 items	3 items (Q3)	3 items (Q3)
Blended Learning Enthusiasm	3 items	3 items	5 items (Q4)	5 items (Q4)
Learning Method Preference	11 items	11 items	11 items (Q5)	11 items (Q5)
Behavioral Engagement	N/A	6 items	N/A	6 items (Q6)
Cognitive Engagement	N/A	9 items	N/A	9 items (Q7)
Emotion	10 items	10 items	(replaced)	(replaced)
Emotional Engagement	N/A	N/A	5 items (Q6)	5 items (Q8)
Positive and Negative Affect	N/A	N/A	10 items (Q7)	10 items (Q9)
Before Class Emotions	N/A	N/A	7 Items (Q8)	7 Items (Q10)
During Class Emotions	N/A	N/A	11 items (Q9)	11 items (Q11)
After Class Emotions	N/A	N/A	6 items (Q10)	6 items (Q12)

Extrinsic Motivation

- Reliability (pre-test $\alpha = .70$ & post-test $\alpha = .76$)
- Definition: To carry out an action in order to reach some separable goals.
 - “I want to get a more prestigious job later on by knowing about the subject matter.”
 - “I want to have a better salary later on by completing all the courses.”
 - “I want to fulfill the university requirement.”

Motivation: Introjected Regulation

- Reliability (pre-test $\alpha = .81$ & post-test $\alpha = .78$)
- Definition: To behave in order to reduce the guilty pressures.
 - “I will feel guilty if I don’t know the course materials.”
 - “I will feel ashamed if I couldn’t discuss with my friends about matters related to the course materials.”
 - (New) “I will feel uncomfortable to explain to others about my absence.”

Motivation: Identified Regulation

- Reliability (pre-test $\alpha = .65$ & post-test $\alpha = .72$)
- Definition: To act behaviors because of internalization of personal goals that associated with extrinsic motives.
 - (Replaced) “I choose to become a person who is knowledgeable about the course.”
 - “Knowing the knowledge about matters in the course is helpful to my [target group e.g. students or patients].”
 - “Knowing the knowledge about matters in the course is helpful to my future career.”

Intrinsic Motivation

- Reliability (pre-test $\alpha = .80$ & post-test $\alpha = .91$)
- Definition: To carry out an action for the inherent pleasure that associated with the action itself.
 - “I think that I will enjoy acquiring knowledge about the course materials.”
 - “I think that I will experience pleasure when I surpass myself in knowledge on the course materials.”
 - “I think that I will feel satisfied when I am in the process of accomplishing difficult exercises in the course.”

Blended Learning Enthusiasm

- Reliability (pre-test $\alpha = .64$ & post-test $\alpha = .65$)
- Definition of enthusiasm: A strong feeling of active interest in something that you like or enjoy
- (Replaced) “Learning in an e-learning environment that utilizes IT in course delivery”
- “Interacting with course learning modules online”
- (Adjusted) “Interacting with your peers in face to face learning exercise”
- (Adjusted) “Interacting with your tutor in face to face sessions”
- (New) “Interacting with your tutor through electronic means”

Learning Method Preference

➤ Reliability (pre-test $\alpha = .70$ & post-test $\alpha = .80$)

Traditional methods:

- Lectures
- Written Tests and Exams
- Closed-ended Written Tasks

Recent methods:

- “Group Projects and Presentations”
- “Instruments for Problem Solving in Authentic Contexts”
- “Online Discussions”
- “Peer Evaluations and Critique”
- “Authentic Products for Learning Context”
- “I.T.-facilitated self studies or exercises”
- “Case-based Studies”
- “Professional Sharing from relevant sectors”

Behavioral Engagement

Reliability (post-test $\alpha = .83$)

Definition: Effort, attention and persistence in an activity.

- “Asked questions in class or contributed to class discussions.”
- “Made class presentation(s).”
- “Worked with other students on projects during class.”
- “Worked with classmates outside of class to prepare class assignments.”
- “Tutored or taught other students (paid or voluntary).”
- “Discussed ideas from your readings or classes with others outside of class (students, family members, coworkers, etc.).”

Cognitive Engagement

Reliability (post-test $\alpha = .91$)

Definition: The self-monitoring of oneself, his/her works, skills and strategies employed in an activity.

“The extent your course experience contributed to:”

- “developing a personal code of values and ethics.”
- “understanding people of other racial and ethnic backgrounds.”
- “understanding yourself.”
- “learning effectively on your own.”
- “working effectively with others.”
- “acquiring broad general education.”
- “thinking critically and analytically.”
- “acquiring job or work-related knowledge and skills.”
- “using computing and information technology.”

Lam & Cheng (2014)

Emotional Engagement

Reliability ($\alpha = .71$)

Definition: Emotions showing motivated involvement in an activity.

- “When I’m in class, I feel good.”
- “When we work on something in class, I feel interested.”
- “Class is fun.”
- “I enjoy learning new things in class.”
- “When we work on something in class, I get involved.”

Positive and Negative Affect

Reliability ($\alpha = .84$ for both positive and negative affect)

Cross-culture positive and negative dimensions of trait affect from International Positive and Negative Affect Schedule Short Form (I-PANAS-SF)

- “Nervous”
- “Determined”
- “Afraid”
- “Inspired”
- “Active”
- “Hostile”
- “Attentive”
- “Ashamed”
- “Upset”
- “Alert”

INTER-CLASS RELATED SUBSCALES

Factor loading ($r_{it} = .50$ to $r_{it} = .80$ among items)

Reliability ($\alpha = .79$ to $\alpha = .93$ among 8 emotion constructs)

- Emotional feelings experienced before, during, and after being in class.
- From Achievement Emotions Questionnaire (AEQ) inter-class related items assessing eight emotions: **enjoyment, hope, pride, anger, anxiety, shame, hopelessness and boredom.**
- 3 items selected from each emotion construct.
- Totally, there were 24 items selected and separated into **Before Class Emotion** (7 items), **During Class Emotion** (11 items) and **After Class Emotion** (6 items).

Before Class Emotions

- “Even before class, I worry whether I will be able to understand the course materials.”
- “The thought of this class makes me feel hopeless.”
- “Thinking about class makes me feel uneasy.”
- “I am full of hope.”
- “I am motivated to go to this class because it’s exciting.”
- “I am confident when I go to class.”
- “I wish I didn’t have to attend class because it makes me angry.”

During Class Emotions

- “I get bored.”
- “I’m embarrassed that I can’t express myself well.”
- “The lecture bores me.”
- “When I make good contributions in class, I get even more motivated.”
- “I am confident because I understand the course materials.”
- “When I say anything in class I feel like I am making a fool of myself.”
- “I feel anger welling up in me.”
- “I have lost all hope in understanding this class.”
- “I get tense in class.”
- “I get restless because I can’t wait for the class to end.”
- “I enjoy being in class.”

After Class Emotions

- “After class I start looking forward to the next class.”
- “I am angry.”
- “I am proud of myself.”
- “I think that I can be proud of what I know about this subject.”
- “I feel so hopeless all my energy is depleted.”
- “I’d rather not tell anyone when I don’t understand something in class.”

(II) Teachers guided reflection sheet

	Opened ended questions in Teachers' reflective evaluation (Reference: Kember, D. et al., 2000a)	Components
Q1.	What stimulated you to start your project? What particular things were you concerned about?	Interest and expectation
Q2a.	To what extent do you feel that your expectations of your project as a whole are being realized?	Concerns of outcome
Q2b.	Were there any outcomes from the project that were unexpected (positive or negative)?	
Q3.	Do you think your project has been successful?	
Q4.	Has your project had any influence on teaching and learning?	Advantages of BL for students
4a.	Students' learning / your teaching/ colleagues teaching	
4b.	Any other benefits?	

	Opened ended questions in Teachers' reflective evaluation (Cont'd)	Components
Q5.	Will the project influence the behavior of you and your departmental colleagues in the future?	Evaluation about administrative aspects
Q6.	Assuming you performed the project with some team members, how did you find this experience?	
6a.	Coordination and cooperation among team members?	
6b.	To what extent do you think such experience is important to the success of the Project?	
Q7.	Would you mind sharing your experience on the variables which affect the success of your project?	Strength and mistakes made in the project
7a.	Factors influencing success	
7b.	Factors giving rise to difficulties	
Q8.	In what way do you think the BL instruction could be improved?	Suggestion
Q9.	Has participating in the project benefits you? (Publications etc.)	Benefited or not

(III) Teachers overall coordinating evaluation

Overall coordinating evaluation questionnaire for teachers

Slightly modified

10 Subscales:	Amount
Motivation for participation	7 items
Framework	6 items
Teamwork experience	5 items
Support	3 items
Outcome	15 items
Influence on the teaching and learning	6 items
PD Events	3 items
Organization	4 items
Need for support	6 items
Quality of support	4 items

Kember, D. et al. (2000b)

Sample items: Motivation for participation

- “I had no previous experience of teaching in blended learning instruction before participating in this project.”
- “I was motivated to participate in this project because I could obtain a grant.”
- “I was motivated to participate in this project because I wanted to improve the quality of my teaching.”
- “I was motivated to participate in this project because I wanted to improve the quality of my students’ learning.”

Sample items: Framework

- “The BL TDG project provided a suitable framework for conducting the project.”
- “The BL project can contribute to improving teaching and learning in my institute.”
- “The BL project is an effective means to improve university teaching and learning in the context of Hong Kong.”

Sample items: Teamwork experience

- “Coordination and cooperation among team members was difficult.”
- “Teamwork is important to the success of the project.”
- “Employing an RA was essential to the success of the project.”

Sample items: Support

- “We received support from our project coordinating team to participate in the project.”
- “We received support from our colleagues to participate in the project.”
- “We received support from our students to participate in the project.”

Sample items: Outcome

- “My expectations of our project as a whole were realized.”
- “The evaluation of our project we conducted has been very effective.”
- “Conducting this project will have a lasting effect on my teaching.”
- “Conducting this project will have a lasting effect on the course I teach.”
- “Our project was successful.”
- “We found it very difficult to carry out our project.”
- “I think I will do similar types of project into my own teaching after this project.”
- “Having conducted this project, I have a greater awareness of important factors affecting the quality of teaching.”
- “Having conducted this project, I have a deeper understanding of educational research in general.”

Influence on the teaching and learning

- “The project has led to an improvement in students’ performance.”
- “The project has led to an improvement in students’ learning approaches.”
- “The project has led to an improvement in students’ attitude.”
- “The project has led to an improvement in teacher-student relationship.”
- “The project has led to an improvement in my teaching.”
- “The project has led to an improvement in the teaching of others in my department.”

Sample items: PD Events

- “The P.D. series on research into teaching and learning in tertiary education was interesting.”
- “The interest group meeting was a valuable opportunity to learn from others.”
- “The presentation(s) is (are) a necessary part of the TDG project.”

Sample items: Organization

- “The project events was organized efficiently.”
- “The project staffs coordinators were helpful.”
- “Communication was effective.”
- “The administration was efficient.”

Reference

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