

Case study on Adopting Self-paced e-Learning for Teacher Training of Vocational and Professional Education and Training (VPET)

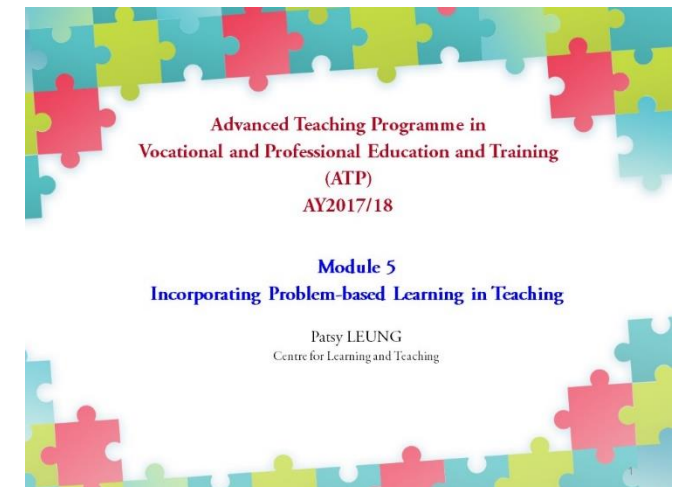
Patsy Pui Sze Leung & Cherrie Hiu Tung Kung

1 June *FSTE Conference 2018*

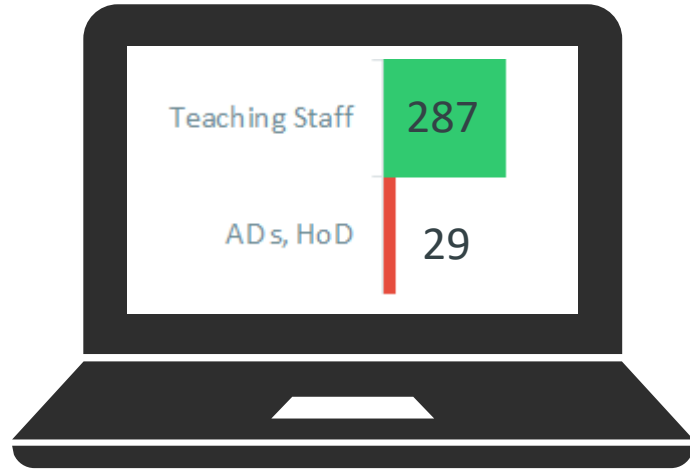
About This Study

Aims

- Identify teacher learning preferences for teacher training
- Learn about teacher perceptions of using self-paced e-Learning for teacher training in one of the training modules named “Incorporating Problem-based Learning in Teaching” in the “Advanced Teaching Programme” offered by Centre for Learning and Teaching of the Vocational Training Council
- Evaluate the effectiveness of the self-paced e-Learning module

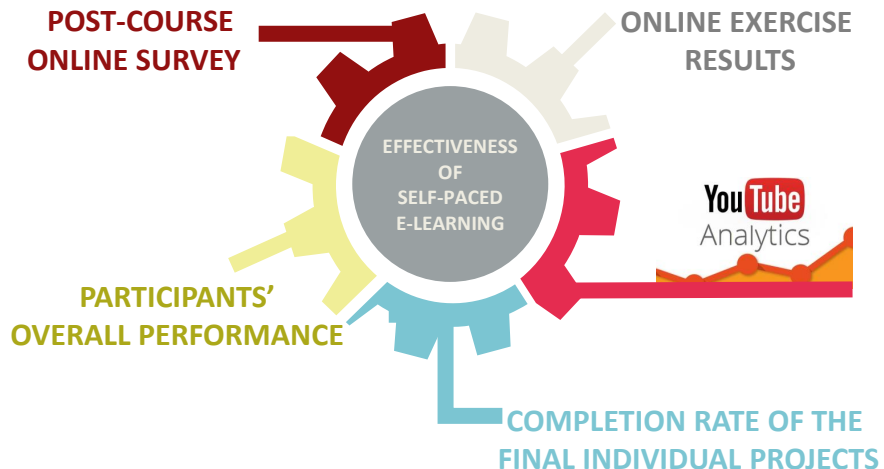


Research Design



ONLINE SURVEY

To understand the views at management level and teaching staff **learning preferences** and **perceptions** towards the use of self-paced e-Learning as a teacher training mode



VARIOUS SOURCES OF QUANTITATIVE AND QUALITATIVE DATA

To evaluate the effectiveness of the self-paced e-Learning training method

Factors Contributing to the Adoption of Self-paced e-Learning for Teacher Training

Packed teaching schedule (1)



Fewer training hours

If there would be a training programme for advancing your skills in VPET teaching, how long would you consider appropriate for the whole programme?

(Please consider total duration including face-to-face sessions and extended learning activities)



16-20 hours	21-25 hours	26-30 hours	Others (Please specify):
61.67%	17.77%	17.42%	3.14%

Factors Contributing to the Adoption of Self-paced e-Learning for Teacher Training

Packed teaching schedule (2)

What is/are the preferred time slot(s) for the programme to be held? (More than one option can be chosen)

Weekday Morning	Weekday Afternoon	Weekday Evening	Saturday Morning
34.5%	72.4%	34.5%	41.4%

Training outside normal working hours



Staff prefer weekdays but may not be feasible due to the packed timetable.



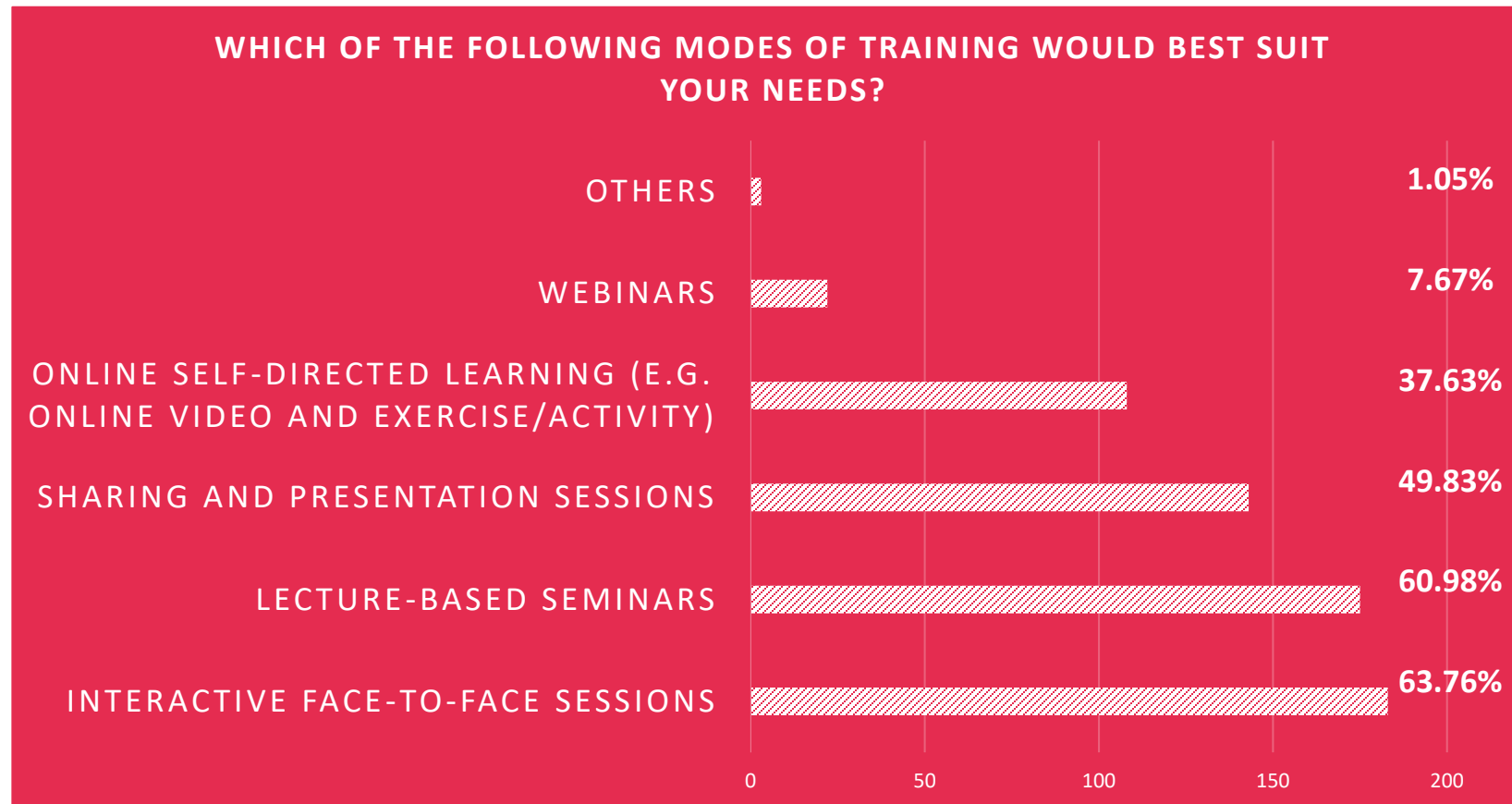
Factors Contributing to the Adoption of Self-paced e-Learning for Teacher Training

Teachers' learning preferences for teacher training



Which of the following modes of training would best suit your needs?

(More than one option can be chosen)



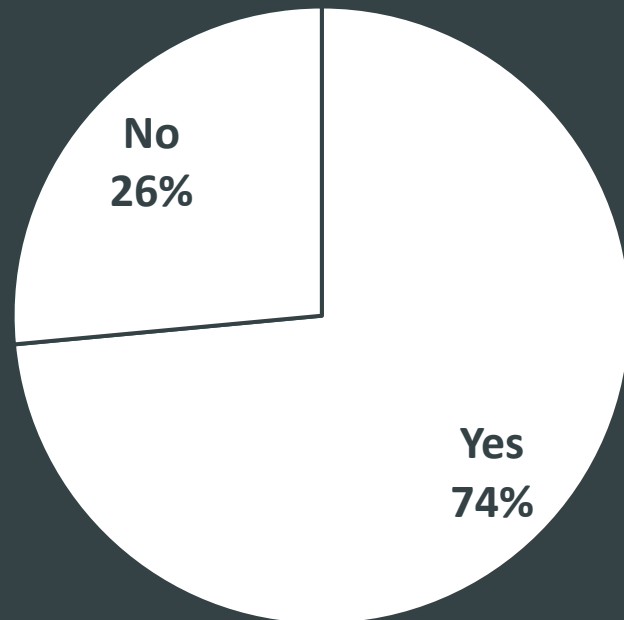
Teachers' positive perception towards self-paced e-learning



Factors Contributing to the Adoption of Self-paced e-Learning for Teacher Training

Management and teachers perception over the use of self-paced e-learning for teacher training (1)

IT WOULD BE MORE FLEXIBLE AND CONVENIENT IF PARTS OF THE TRAINING COULD BE CONDUCTED VIA ONLINE LEARNING PLATFORMS



More flexible and convenient



Factors Contributing to the Adoption of Self-paced e-Learning for Teacher Training

Management and teachers perception over the use of self-paced e-learning for teacher training (2)

Enrich e-Learning skills



6-point Likert Scale
(6: strongly agree;
1: strongly disagree)

4.8

The design of mini- Massive Open Online Course (MOOCs) and a project in self-paced learning could enrich teaching and instructing staff's learning experience.

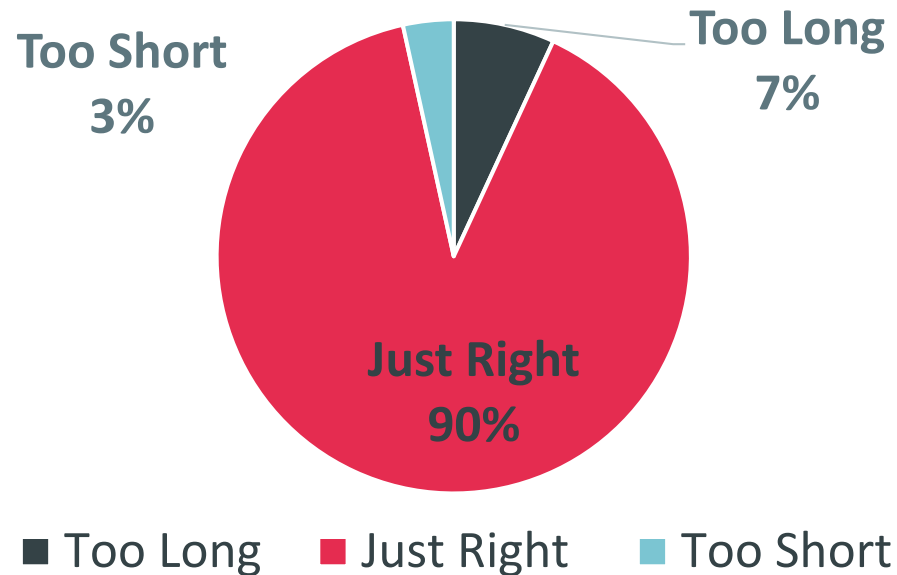


- 1. Depends on the content and style of delivery, ensure it is stimulating and interesting.*
- 2. Seems heavy workload*
- 3. Wonder whether feedback from colleagues will be collected, say half year or one year later, after completion of the programme*

Factors Contributing to the Adoption of Self-paced e-Learning for Teacher Training

Management and teachers perception over the use of self-paced e-learning for teacher training (3)

The length of the self-paced learning (6 hours)
is...



Programme Structure

“Advanced Teaching Programme” Offered by Centre for Learning and Teaching, VTC

Module	Title	Face-to-Face Contact (Hours)	Self-paced Learning	
			e-Learning (Hours)	Project (Hours)
1	Current Learning and Teaching Initiatives in VPET	3	--	--
2	Enhancing VPET Teachers' Practical Skills	2	1	--
3	Facilitating ICT-enabled Collaborative Learning	2	1	--
4	Fostering an Inclusive Classroom	3	--	--
5	Incorporating Problem-based Learning in Teaching	--	1	2
6	Elective VPET Topic	3	--	--
Sub-total Hours		13	3	2
Total Hours		18		

Self-paced e-Learning Training Module

Moodle Platform

Module 5: Incorporating Problem-based Learning in Teaching

Self-paced Learning

Please watch the videos and complete the Multiple Choice Exercise. You are recommended to complete the self-paced learning prior to the face-to-face workshop.

 Module 5: Videos

 Module 5: Multiple Choice Exercise

The online exercise of Module 5 is adapted and modified from http://highered.mheducation.com/sites/0078110300/student_view0/chapter11/multi <https://education.microsoft.com/courses-and-resources/courses/problem-based-learning>

 Module 5: PowerPoint

 M5: Project Guidelines_Spring

 Module 5: Project Guidelines Sample 1

Module 5: Project Guidelines Sample 2

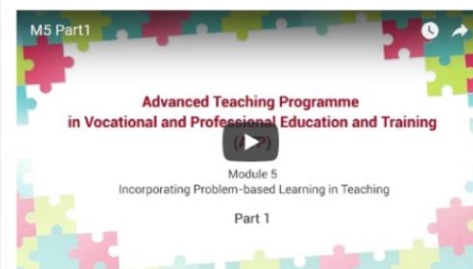
 Resource List

Project Submission

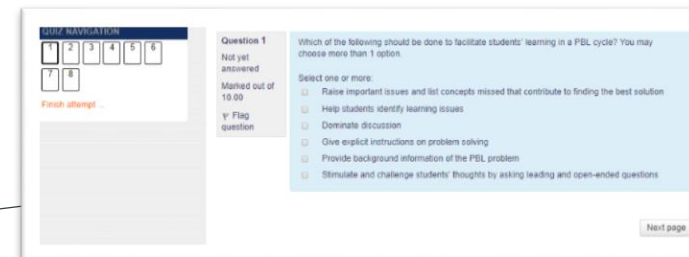
 Please submit your project here

Videos

Module 5: Videos



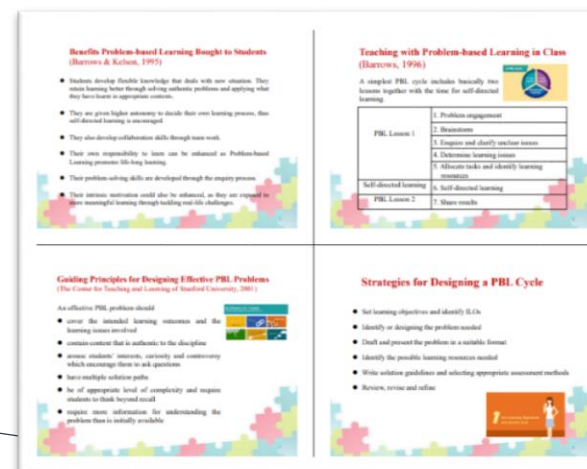
Online Exercises



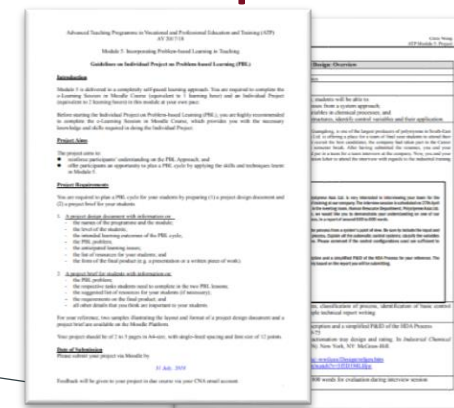
Resource List



PowerPoint Notes

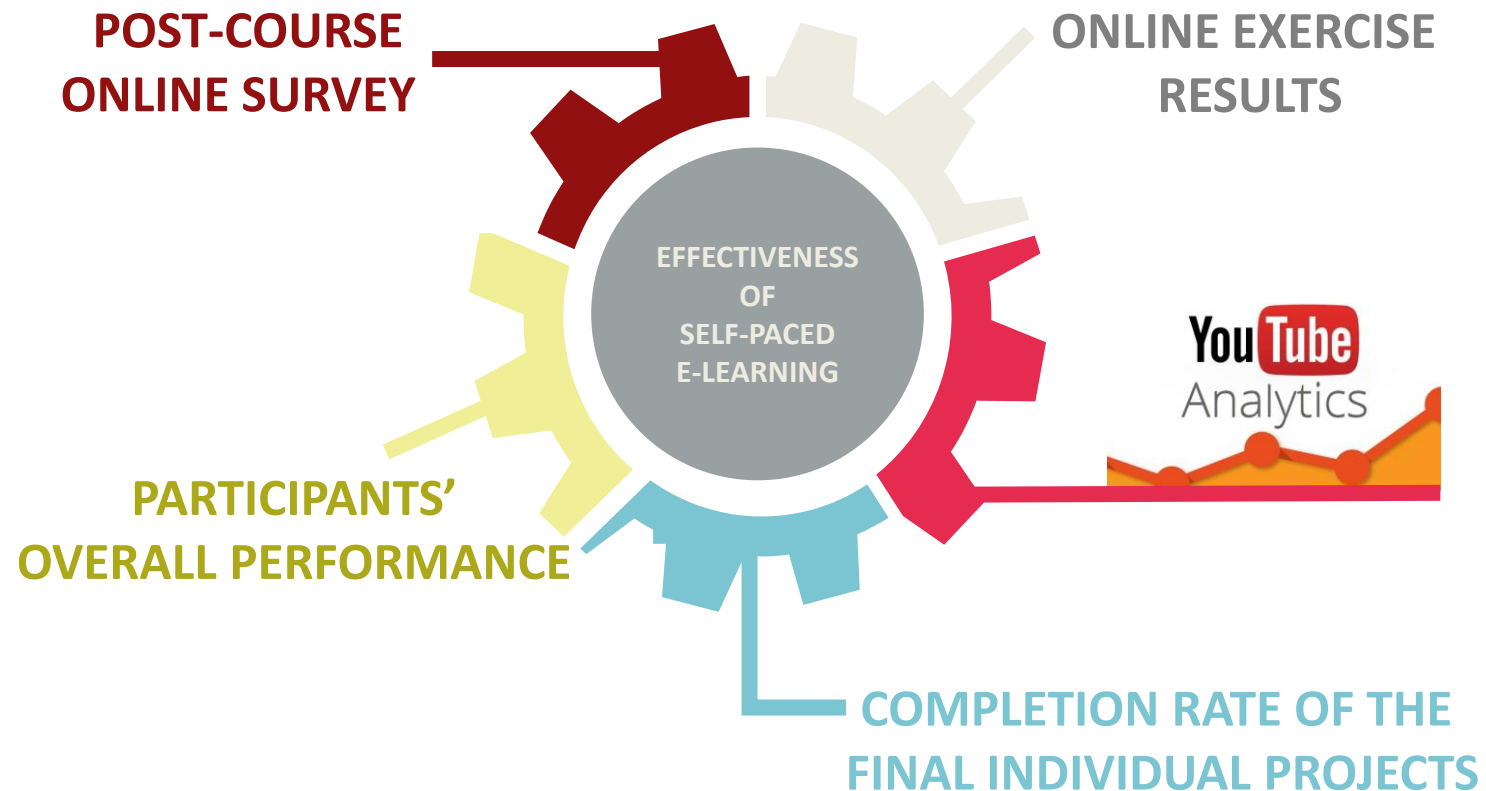


Project Guideline and Samples



Research Design

TO EVALUATE THE EFFECTIVENESS OF THE SELF-PACED E-LEARNING TRAINING METHOD



Module 5: Incorporating Problem-based Learning in Teaching

*Advanced Teaching Programme (ATP) [Autumn]
24 Oct 2017 to 28 Feb 2018*



- **42 teachers enrolled in the ATP programme**



- **Online exercise completion rate: 29 (69%)**
- **Average score: 70.69/80 (88.4%)**
- **Full marks: 14/42 (33.3%)**



- **Individual project: To design a PBL cycle**
- **Completion rate: 28 (66.7%)**

Findings of the Post-course Online Survey



5-point Likert Scale
(5: strongly agree;
1: strongly disagree)

4.23

Q.1 The module was well-structured.

4.19

Q.2 The content was relevant and achieved its stated learning outcomes.

4.15

Q.3 The module was well-facilitated. (e.g. use of examples and scenarios, and online activities).

Findings of the Post-course Online Survey



5-point Likert Scale
(5: strongly agree;
1: strongly disagree)

4.27

Q.4 The module provided quality materials and resources. (e.g. PowerPoint, resource list, individual project samples)

4.19

Q.5 OVERALL, I am satisfied with this module.

4.23

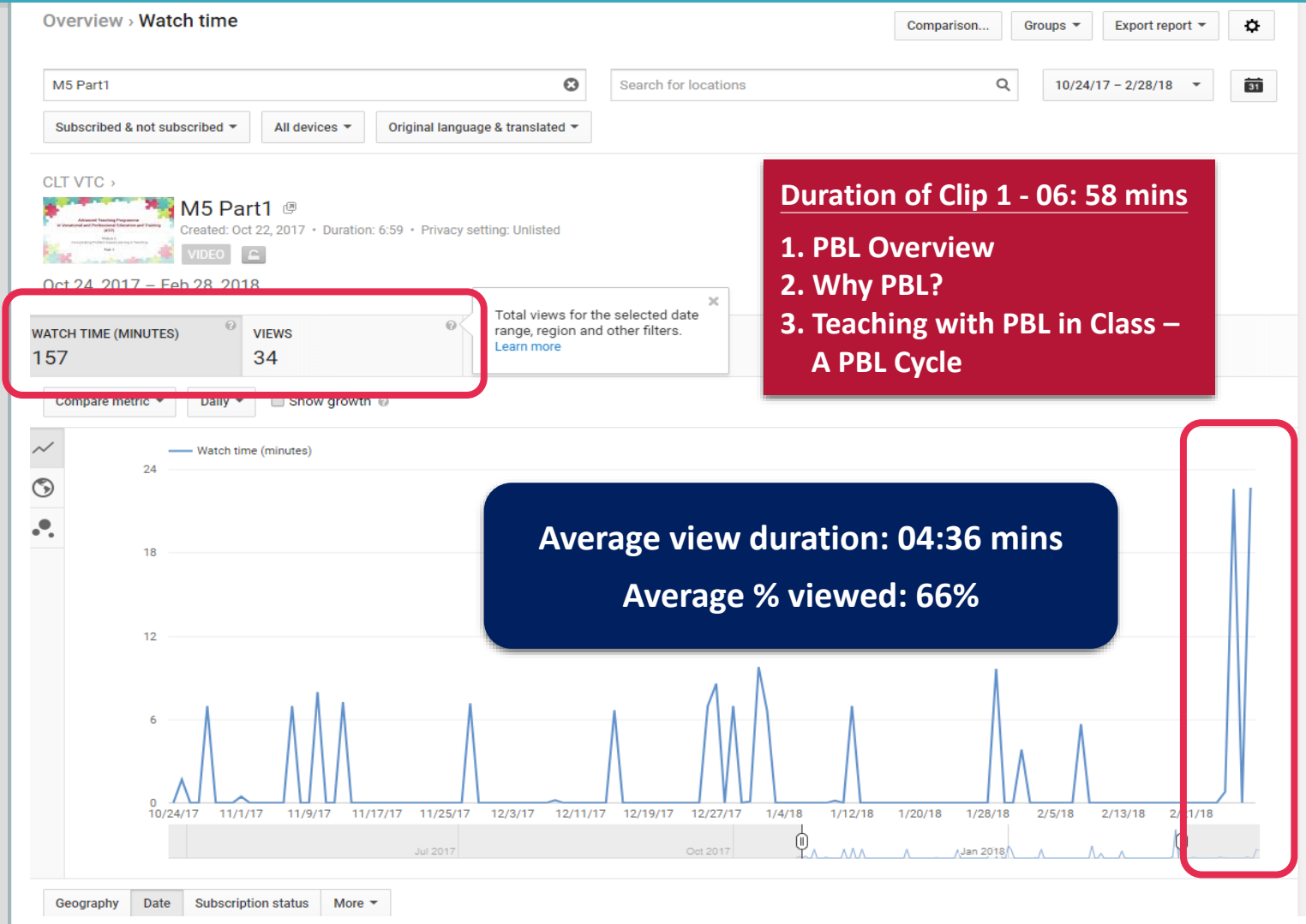
Q.6 The videos, the materials and the resources supported my completion of the individual project.



- 1. The module was useful for me to develop my teaching skills in the future.*
- 2. The feedback is very useful to improve my teaching.*

YouTube Analytics: Teachers' Self-paced e-Learning Behavior







Module 5: Incorporating Problem-based Learning in Teaching



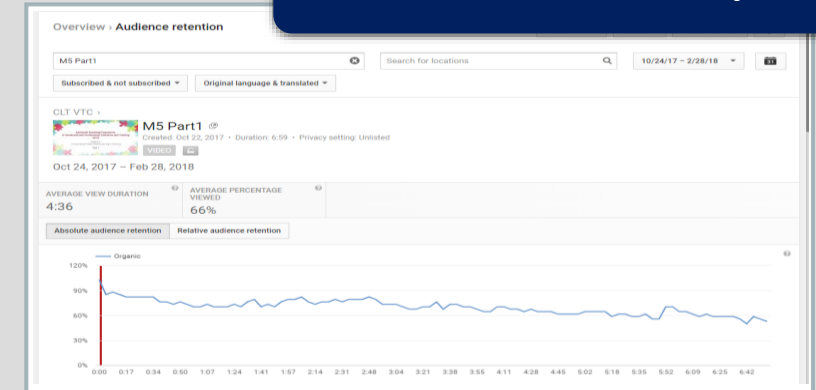
Duration of Clip 1 - 06: 58 mins

1. PBL Overview
2. Why PBL?
3. Teaching with PBL in Class – A PBL Cycle






Geography Date Subscription status Device type More ▾

Device type 	Watch time (minutes) 	Views 	Average view duration 	Average percentage viewed 
Computer 	150 (96%)	33 (97%)	4:32	65%
Unknown	7 (4.4%)	1 (2.9%)	6:58	100%

The devices used: Computer

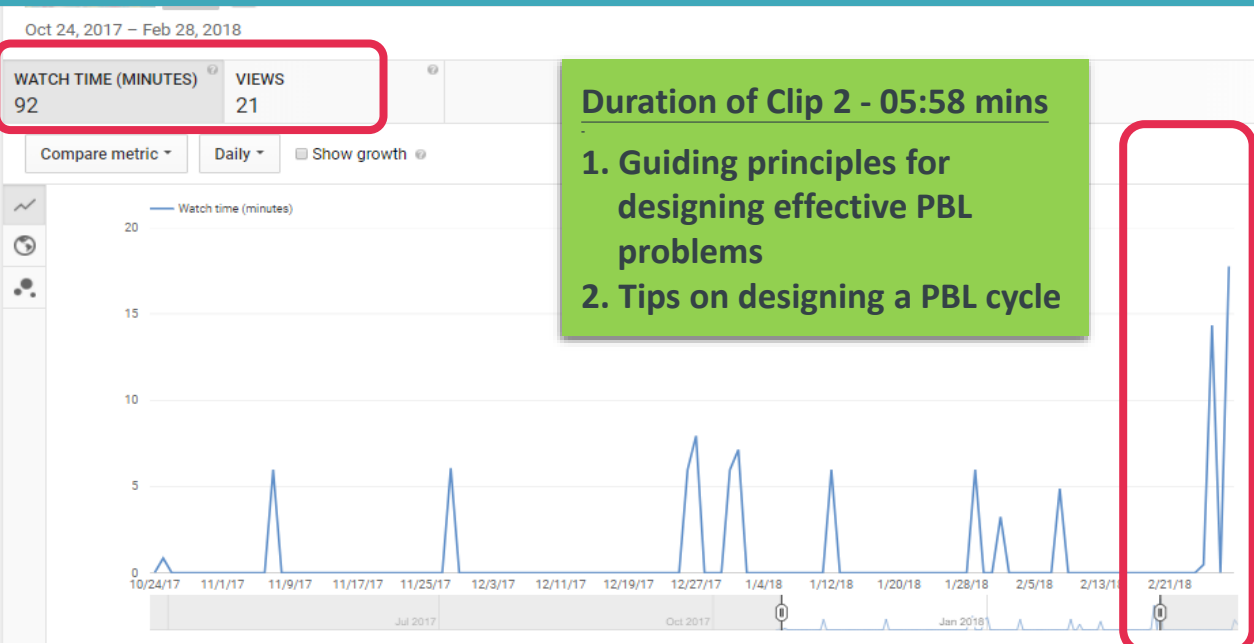


Geography Date Subscription status More ▾

Date 	Watch time (minutes) 	Views 	Average view duration 	Average percentage viewed 
Oct 25, 2017	2 (1.1%)	1 (2.9%)	1:40	24%
Oct 28, 2017	7 (4.4%)	1 (2.9%)	6:58	100%
Nov 1, 2017	0 (0.0%)	1 (2.9%)	0:27	6.5%
Nov 7, 2017	7 (4.4%)	1 (2.9%)	6:58	100%
Nov 10, 2017	8 (5.1%)	1 (2.9%)	7:59	114%
Nov 13, 2017	7 (4.4%)	3 (8.8%)	2:25	35%
Nov 29, 2017	7 (4.4%)	3 (8.8%)	2:25	34%
Dec 6, 2017	0 (0.0%)	1 (2.9%)	0:12	2.9%
Dec 15, 2017	7 (4.4%)	1 (2.9%)	6:40	96%
Dec 26, 2017	7 (4.4%)	1 (2.9%)	6:58	100%
Dec 27, 2017	9 (5.5%)	1 (2.9%)	8:34	123%
Dec 29, 2017	7 (4.4%)	1 (2.9%)	6:58	100%
Dec 31, 2017	0 (0.0%)	1 (2.9%)	0:05	1.4%
Jan 1, 2018	10 (6.2%)	2 (5.9%)	4:55	70%
Jan 2, 2018	7 (4.4%)	2 (5.9%)	3:18	47%
Jan 10, 2018	0 (0.0%)	1 (2.9%)	0:10	2.4%
Jan 12, 2018	7 (4.4%)	1 (2.9%)	6:58	100%
Jan 29, 2018	10 (6.2%)	1 (2.9%)	9:39	138%
Feb 1, 2018	4 (2.4%)	1 (2.9%)	3:49	55%
Feb 8, 2018	6 (3.6%)	1 (2.9%)	5:40	81%
Feb 15, 2018	1 (0.5%)	2 (5.9%)	0:24	8.7%
Feb 24, 2018	23 (14%)	3 (8.8%)	7:32	108%
Feb 28, 2018	23 (15%)	3 (8.8%)	7:34	108%

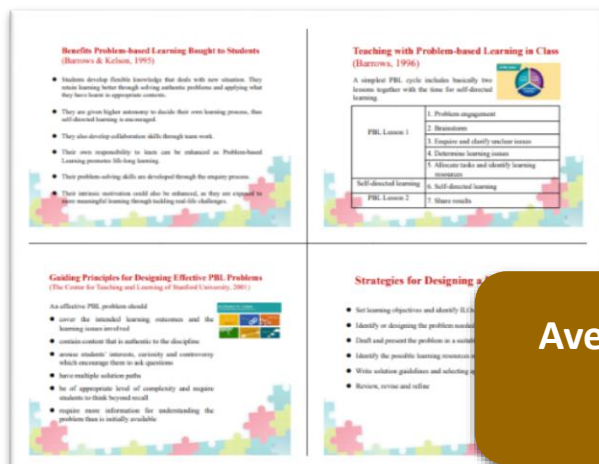
YouTube Analytics: Teachers' Self-paced e-Learning Behavior

Module 5: Incorporating Problem-based Learning in Teaching (Clips 2 & 3)



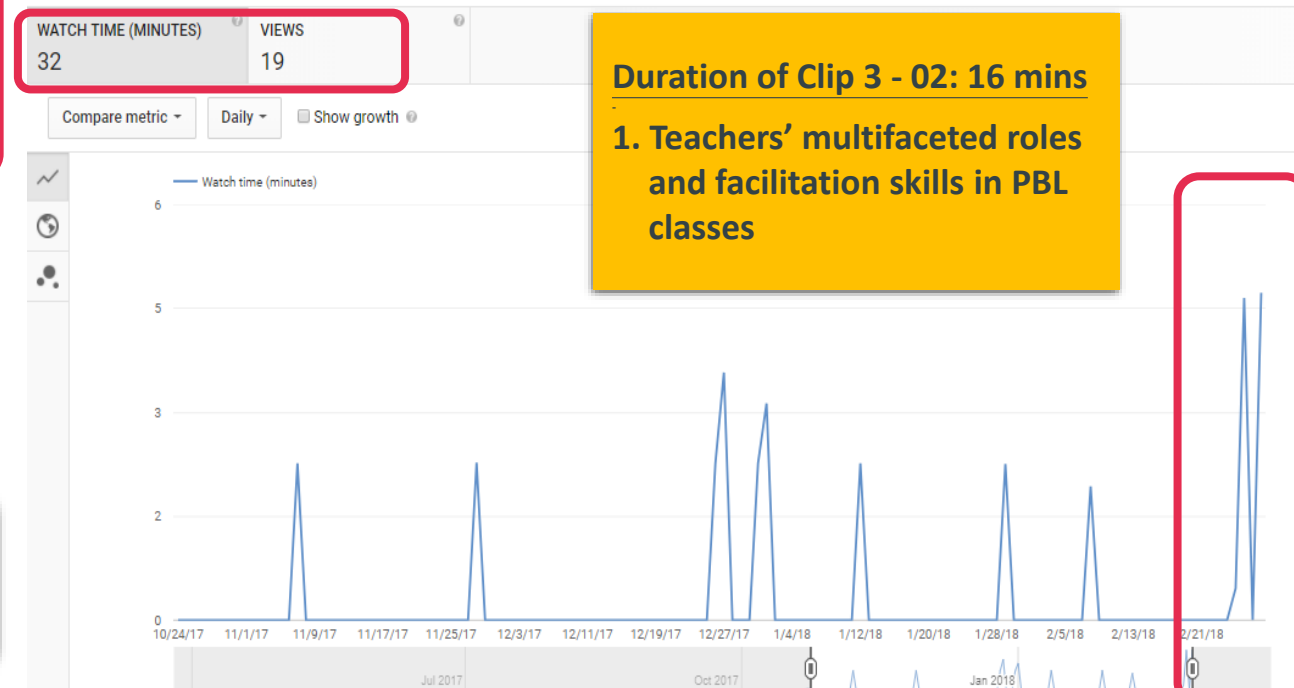
Average view duration: 04:24 mins

Average % viewed: 74%



Average view duration: 01:41 mins

Average % viewed: 74%



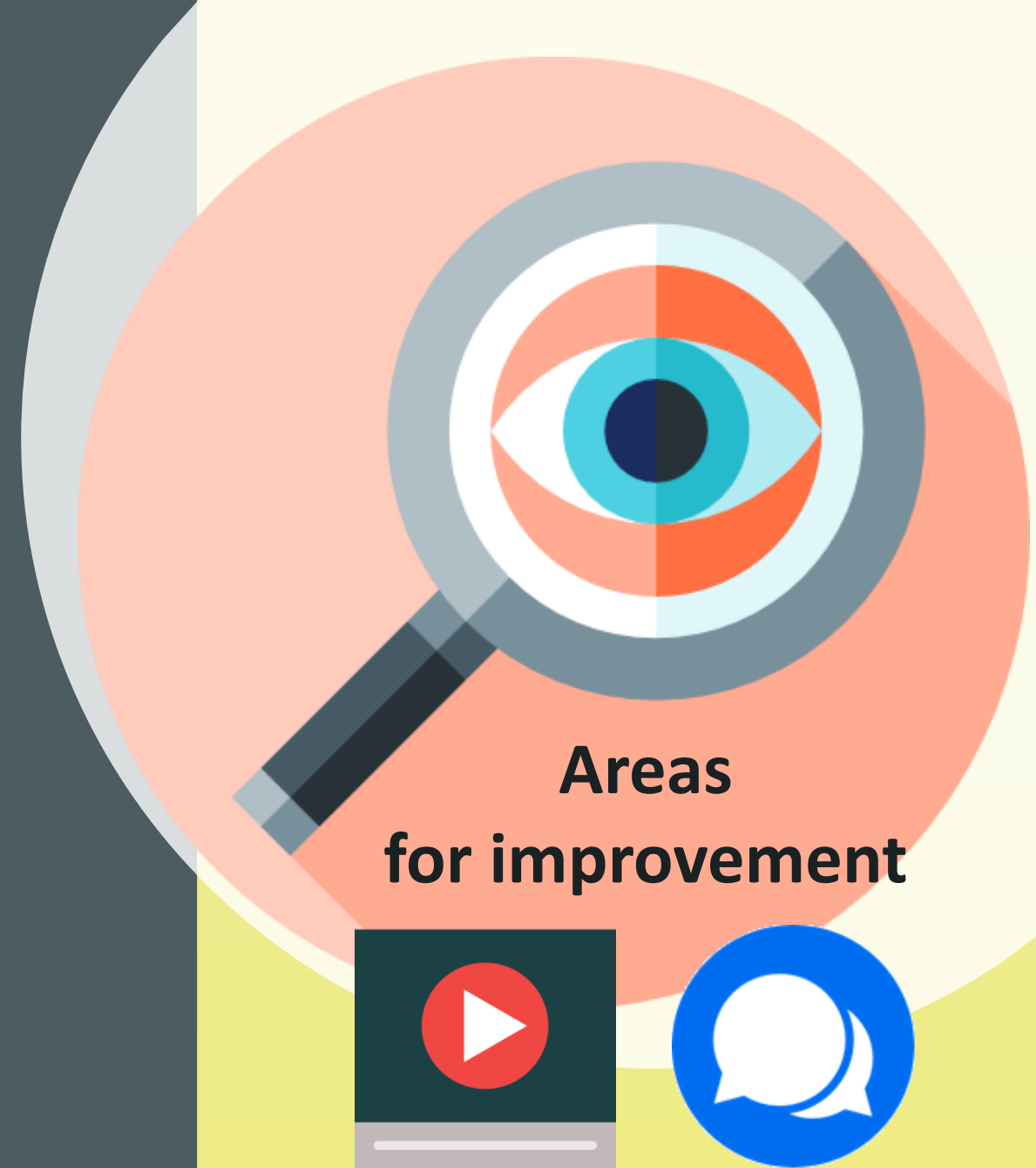
Overall Performance of the Individual Projects Subjected by Participants

- 30 participants submitted their individual projects
- Most of them were able to:
 - design a PBL problem which was manageable for students and with appropriate degree of “openness” for students’ discussion and collaboration.
- 28 out of 30 participants completed the individual project.



Conclusion

- Acceptance of self-paced e-Learning was high.
- Self-paced e-Learning was perceived as an effective mode of teacher training.
- Participants were in favor of self-paced e-Learning training if there were sufficient and multiple online learning materials to support their learning.



Thank you very much!

