



 ADULT
LEARNING
SYMPOSIUM

Micro-learning to support
just-in-time learning for
academic staff @
Temasek Polytechnic

Pratima Majal | Woo Boon Seong
2 November 2018

Supported by

IAL INSTITUTE FOR
ADULT LEARNING
SINGAPORE

AN INSTITUTE OF SKILLS *future* SG



PEOPLE

15 LA full-time staff
5 Staff seconded to LA
25 LA Associates



Access & Flexibility



- eResources provision/integration
- Micro-learning exploration

Interaction & Visualisation



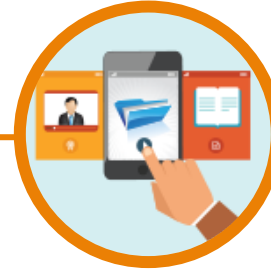
- AR/VR exploration
- PolyMall module development

Engagement & Collaboration



- Gamification platform
- Repurposing of learning spaces

Assessment & Feedback



- E-assessment exploration

Insight & Understanding



- Learning Analytics

Supporting Structures

Innovation Fund

Professional Development

Infrastructure Upgrade

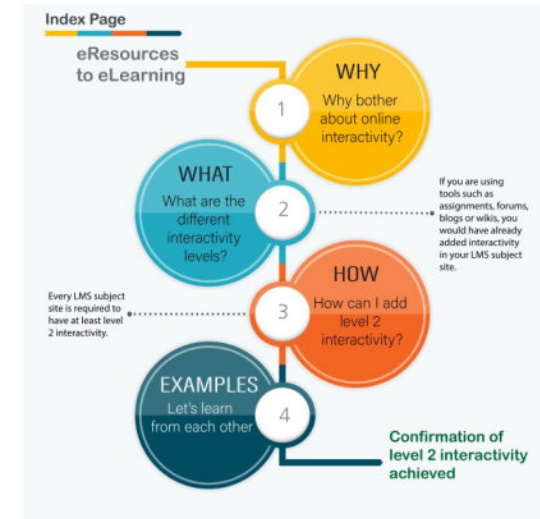
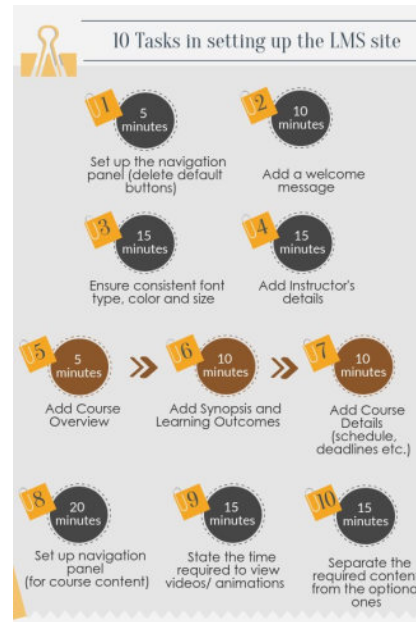


Micro-Learning Courses for Pedagogical Professional Development

CTEL (120 hours)

Certificate in Technology-Enhanced Learning

TP-wide MLCs (available to all lecturers)





1

What is Micro-Learning?

2

Why adopt Micro-Learning?

3

How we designed and implemented Micro-Learning for JIT Learning?



● **Content**

Bite-sized to quickly close a knowledge or skills gap

● **Time-taken**

10 to 15 minutes

● **Learning platform**

Mobile platforms

Some challenges faced by adult educators with regards to eLearning



Many of my learners are not regular and absenteeism is quite high in my class.



My learners don't have time for eLearning.



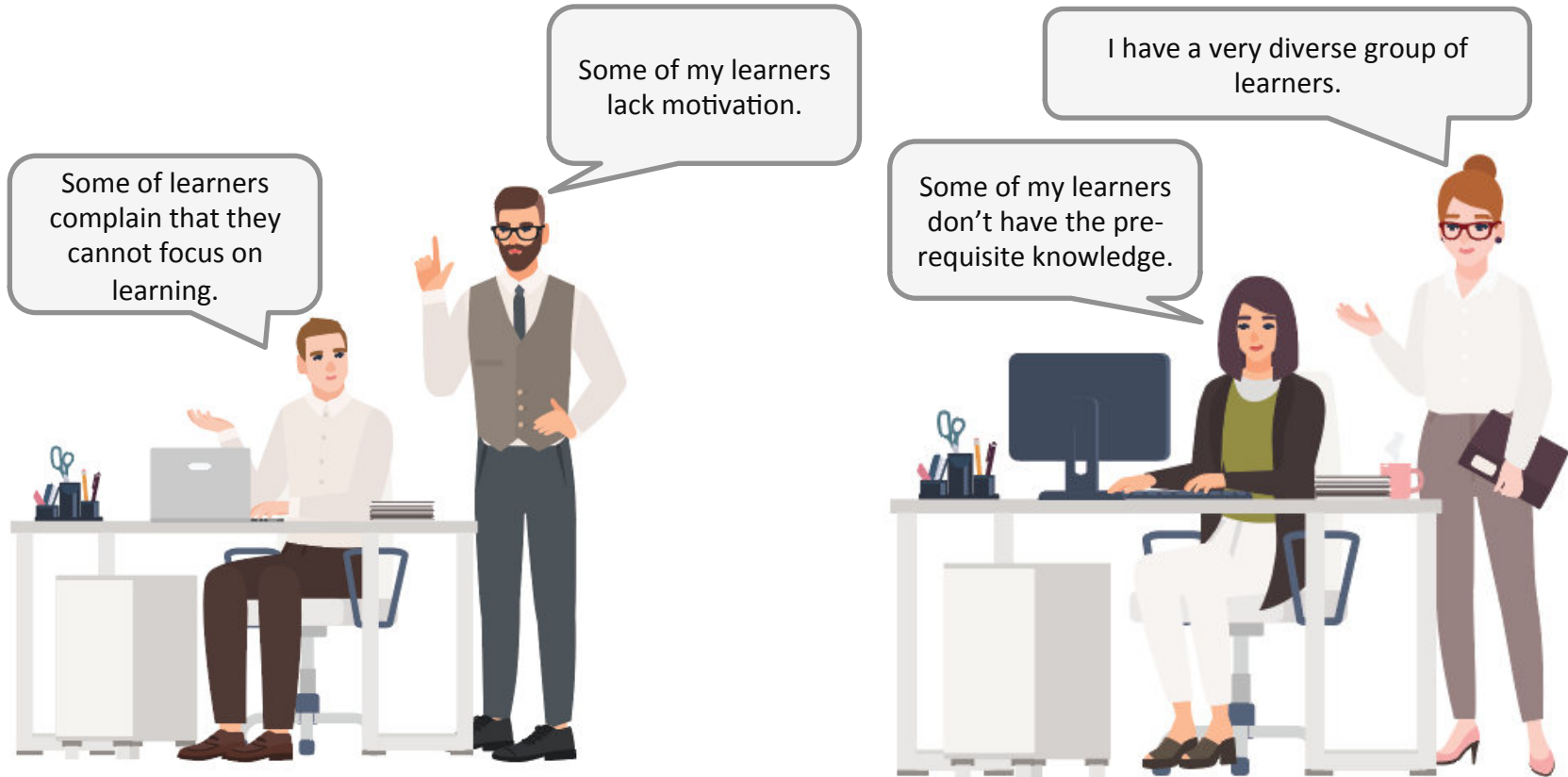
Mine are not used to eLearning.



Some of my learners seem to have technophobia.



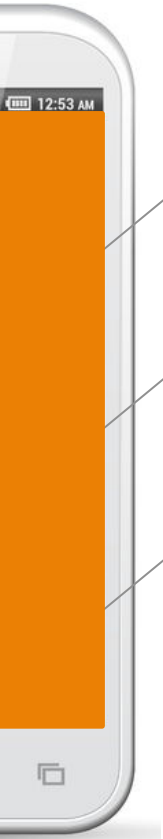
Some challenges faced by adult educators with regards to eLearning





Micro-Learning has been found to address the needs of learners in the most **efficient** and **effective** manner possible.

Grovo (2014)



- **Content**

Bite-sized to quickly close a knowledge or skills gap

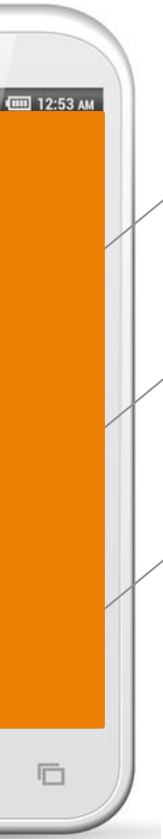
- **Time-taken**

- **Learning platform**

aides **Memory**

aides identification of **Misconceptions**
or challenges students face

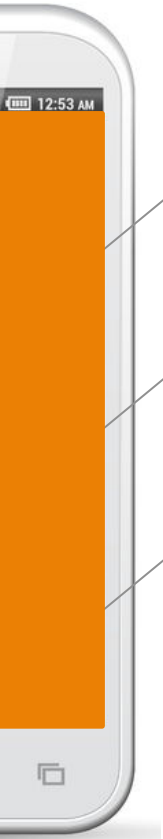
enhances **Motivation**



- Content
- **Time-taken**
10 to 15 minutes
- Learning platform

Does not disrupt **work**

Caters to learners'
short attention span



- Content
- Time-taken
- **Learning platform**
Mobile platforms

Mobile learning saves **Time**

Easy **Access** for
Just-in-Time learning



I have PET, CET,
Industry projects etc.
etc. there is no time to
attend workshops.



I don't have time for
eLearning.



Common challenge faced by our
academic staff

Not enough **TIME**
for professional
development



Workplace training is **most effective** when the **training happens just in time** as part of a worker's regular job activities.

Collins et. al (1997)

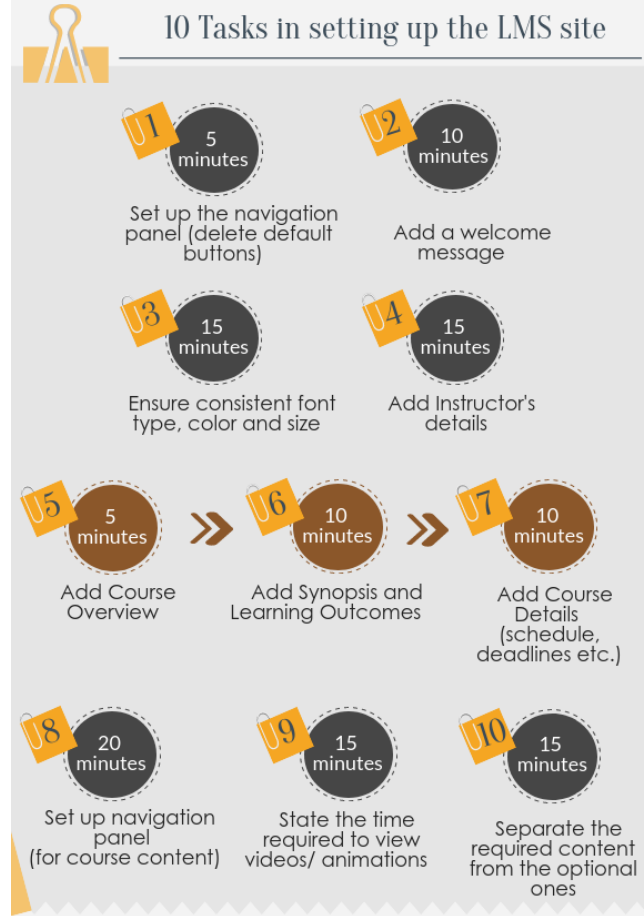


In the past few years **technology** has become an **integral part of workplace learning.**

Wang (2017)



Just-in-Time performance aid to set up the LMS site



Micro-Learning for Just-In-Time Learning



10 Tasks in setting up the LMS site

J1 5 minutes

Set up the navigation panel (delete default buttons)

J2 10 minutes

Add a welcome message

J3 15 minutes

Ensure consistent font type, color and size

J4 15 minutes

Add instructor's details

J5 5 minutes

Add Course Overview

J6 10 minutes

Add Synopsis and Learning Outcomes

J7 10 minutes

Add Course Details (schedule, deadlines etc.)

J8 20 minutes

Set up navigation panel (for course content)

J9 15 minutes

State the time required to view videos/ animations

J10 15 minutes

Separate the required content from the optional ones

Before

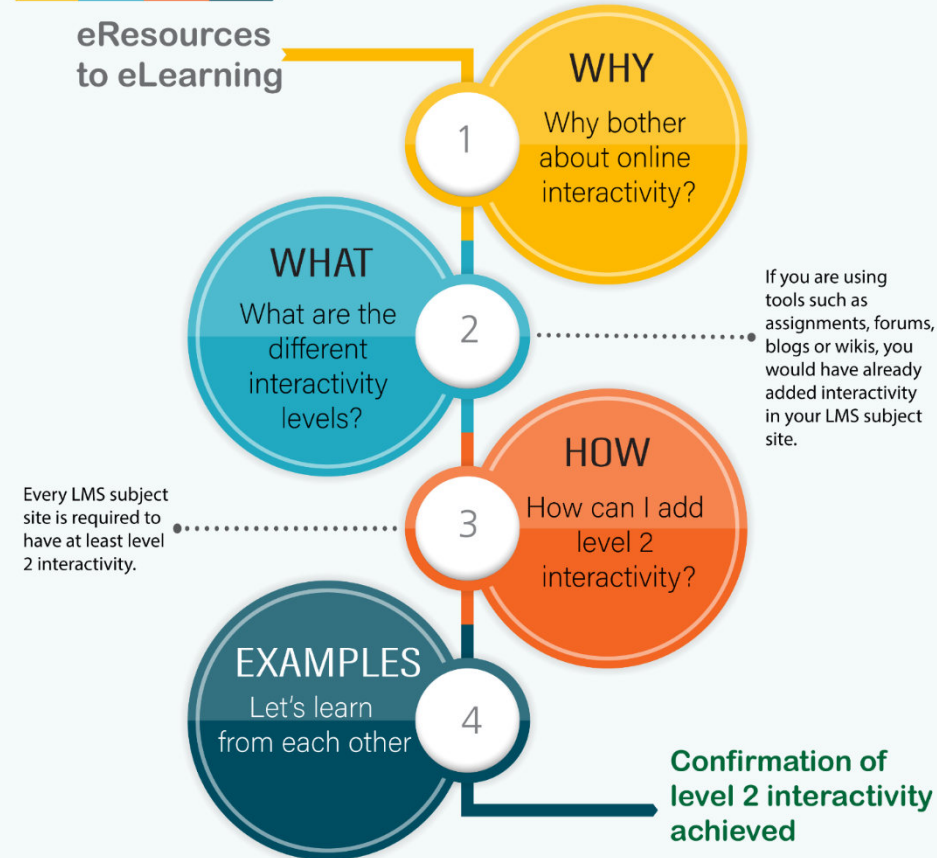
After



Performance aid for adding Level 2 interactivity

Index Page

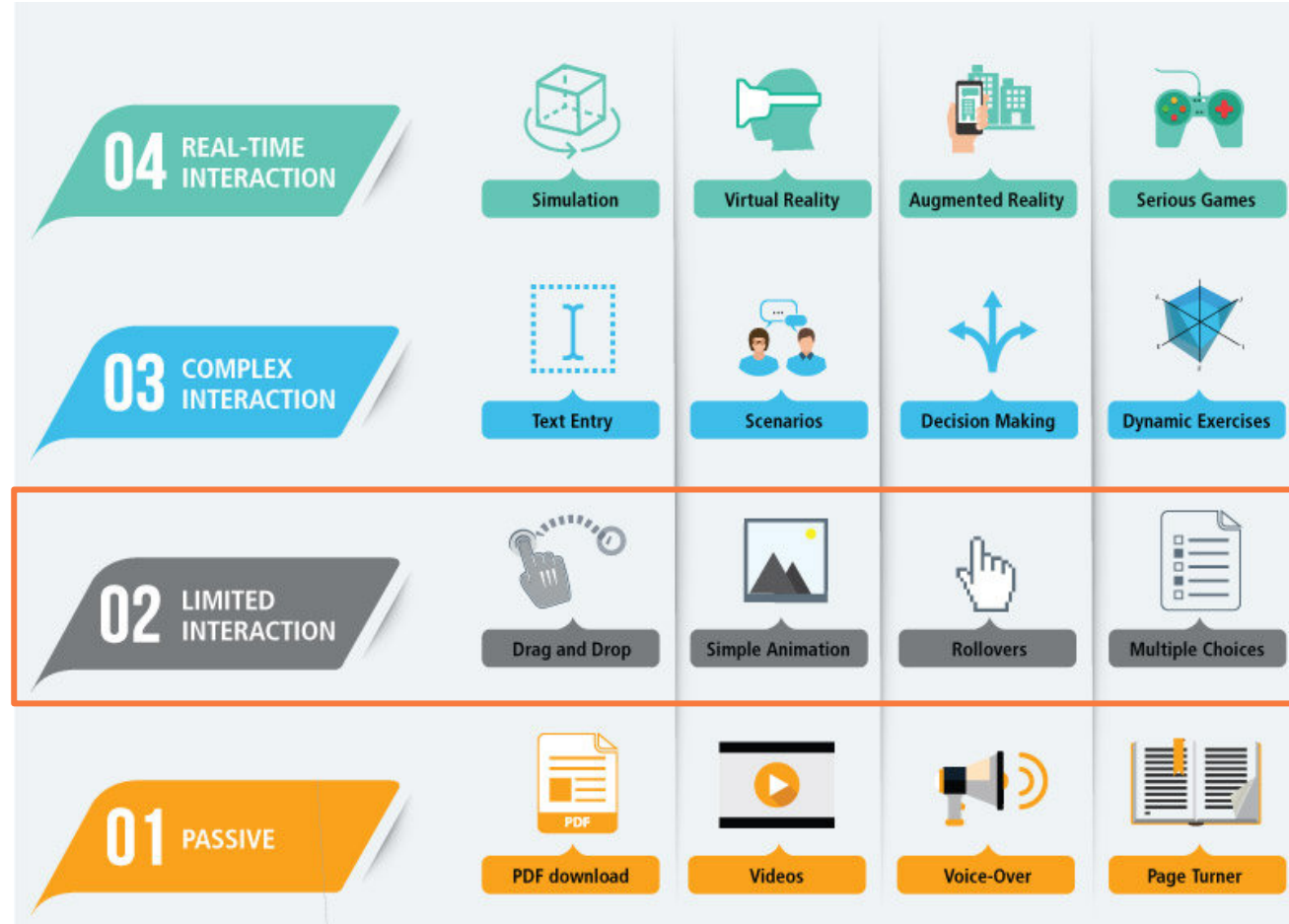
eResources
to eLearning

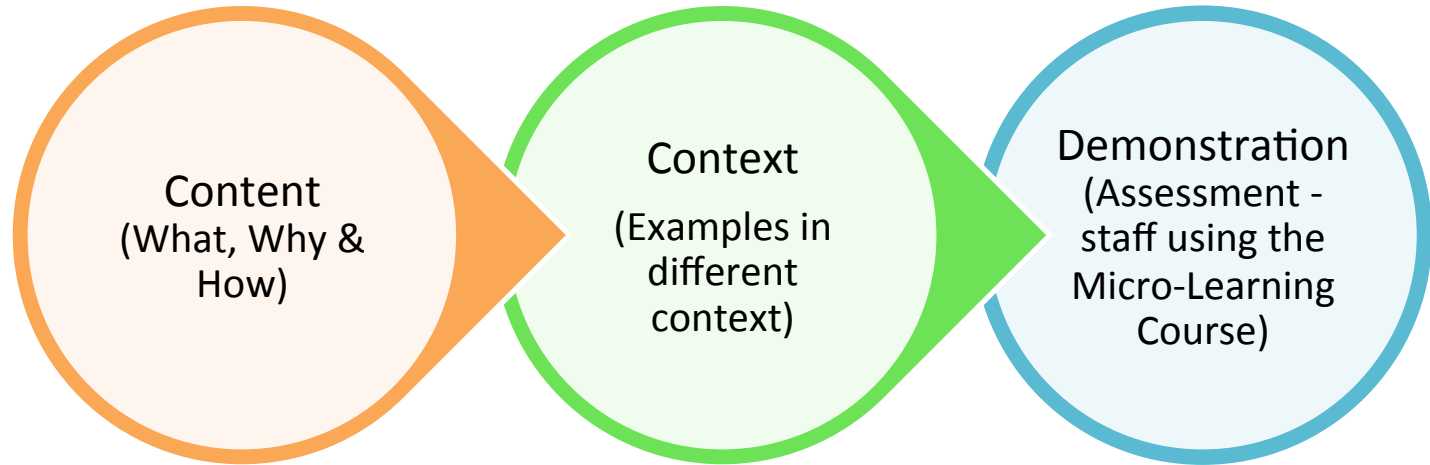


Micro-Learning for Just-In-Time Learning



Requirement for all CET
modules





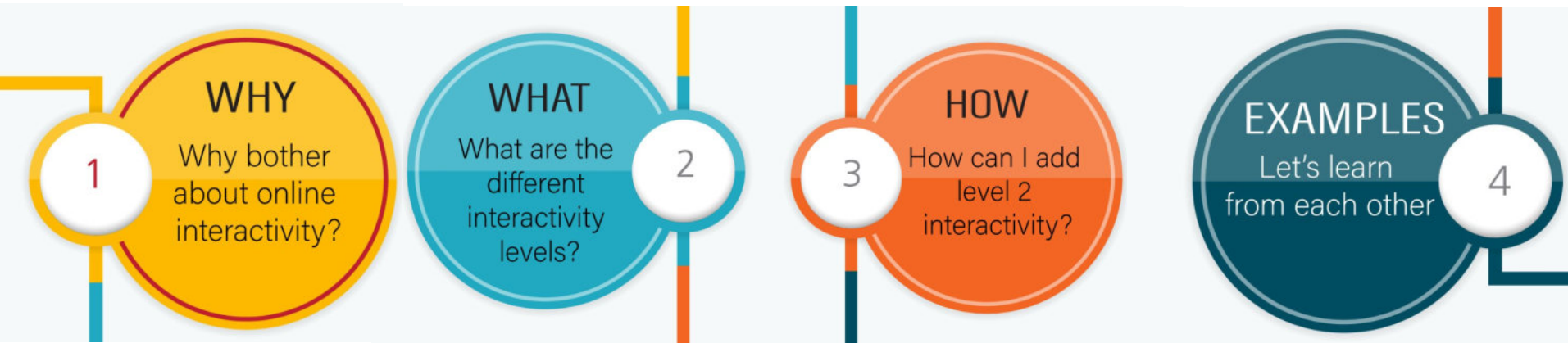
Sequencing Adopted for the Micro-Learning Courses



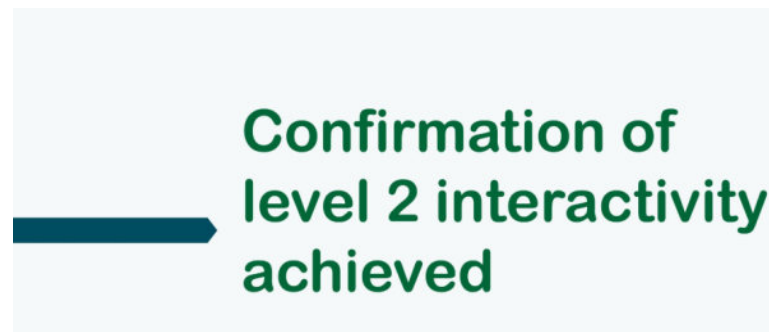
Example

Content

Context



Demonstrate





The two task-based micro-learning courses have been used by lecturers to enhance
more than **350** subject sites

Feedback from Staff

“Good and detailed step-by-step instructions”

“The MLC2 on eResources provided me with a quick reference to different tools that I could use to reach level 2 interactivity.”

“The hands-on portion is most important for any of such setup. Thanks for sharing.”

“I learnt several useful tips on how to enhance an LMS site. Thank you.”

Designing Micro-Learning for Just-In-Time Learning



1
Identify
Action
Points

2
Chunk your
material

3
Identify
mobile
platform

4
Make it
engaging
(Sequence -
Tell-Show-Do
Present using
engaging
formats)

5
Plan for
assessment
and
evaluation



NOTE

Identify the ‘right’ content for micro-learning to encourage work-place learning

Micro-learning is about finding “**application points**” that promote working proficiency in a particular area.

Grovo (2017)



What is Micro-Learning?



Why adopt Micro-Learning?



How we designed and implemented Micro-Learning for JIT Learning?



Collins, J. A., Greer, J. E., Kumar, V. S., McCalla, G. I., Meagher, P., & Tkatch, R. (1997). Inspectable user models for just-in-time workplace training. In *User Modeling* (pp. 327-337). Springer, Vienna.

Grovo, 2014. *Bite Size Is the Right Size How Microlearning Shrinks the Skills Gap in Higher Education*. White paper retrieved on July 2017 from http://www.ecampusnews.com/files/2014/12/Grovo_Higher_ed.pdf

Grovo, 2017. *Future-Proof Your Workforce With Microlearning*. eBook retrieved on 10 June 2017 from <http://blog.grovo.com/ebook-futureproof-workforce-microlearning/>

Wang, M. (2018). Emerging Technologies for Workplace Learning. In *E-Learning in the Workplace* (pp. 29-39). Springer, Cham.