Curriculum Design Pattern

Global Learning by Design

Name of Pattern	**Personalising the Flipped Classroom**
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Abstract

The student cohort in the common core course, Business Computing 1, is very large (approx. 1000), with a wide variance of prior experience.

- All communication originates from the lecturer, so there is a risk that students are not able to form an effective relationship with their tutor/s, and will perceive the learning experience to be somewhat impersonal.
- Students with prior knowledge in the business computing area are required to undertake unnecessary reading and activities, resulting in frustration and lower motivation.
- Tutors previously used standardised instructions/lesson plans which do not allow for them to personalise the workshops to match their student learning profiles.

Rationale

This pattern aims to **personalise learning** and communication. It will:

- promote a **more meaningful relationship** between the tutors and their students
- allow students to assess their prior **knowledge/skill level** prior to workshops (and therefore only undertake pre-reading and activities where required)
- enable tutors to **personalise the workshop content/ activities**, using shared resources, within a standardised framework, as well as provide feedback from them to the teaching team.

Learners

The pattern can have wide application in regard to subject area and level.

- It will be most valuable for **very large class sizes**, with multiple tutors.
- It can readily be adapted for delivery both on **campus** and **online**.
- It is most suited to courses where **online tests** can be constructed to measure knowledge/skills (i.e. not higher order cognitive skills).

Category

Personalisation, flipped classroom, large classes, online tests, diagnostic assessment.

Outcome/impact

The students' experience will be enhanced through:

- undertaking reading/activities only where they do not have the required entry knowledge/skills for the workshops, through the use of online diagnostic tests
- receiving communications such as announcements and instructions directly from their tutor (via mobile technology if desired), resulting in a more personalised relationships (one of 15—30 students, rather than one of 1000)
- attending workshops where the content, resources and activities are tailored to their workshop group's needs (within the framework of a standardised lesson plan), and allow time for more interaction and concentration on practice and application rather than on basic skills development.

The academics/teaching staff will have the opportunity to:

- access a range of resources (facilitators guides, PPTs, activities etc.) that have been developed by the members of their teaching team
- tailor the workshop content to suit the needs of their group
- access learning analytics on Blackboard access/activity and results of diagnostic tests
- provide feedback and suggest possible improvements regarding the workshops, to the lecturer and the other tutors.

Alignment

The elements of this curriculum design pattern align to the lectures, preparatory workshop activities, review exercises and assessment, providing comprehensive scaffolding of learning. The curriculum for Business Computing 1 is adequately supported by resources (prescribed textbook including activities, PowerPoint files and video lecture capture) in Blackboard.

Challenges

Successful implementation of the pattern assumes that all students will complete the diagnostic tests and follow the tutors' recommendations to undertake the pre-reading and preparatory activities related to any questions that they could not successfully complete.

Students will need to be prepared to **take some responsibility for their learning**, and be able to identify the benefits of this approach.

The **active involvement** of the teaching team (lecturer and tutors) is needed to:

- support the students to undertake their more active role in the learning process
- compose recommended communications to students, and adapt for the needs of the groups
- construct appropriate diagnostic tests
- personalise the workshop learning plan
- source or construct, and share, resources for the workshops
- provide useful feedback on the success or otherwise of the workshop content and activities.

It is recommended that the teaching team meets prior to the commencement of semester, to discuss the aims/benefits of the pattern implementation, and the level of involvement required. It would be advantageous to identify one or more "champions" from the teaching team.

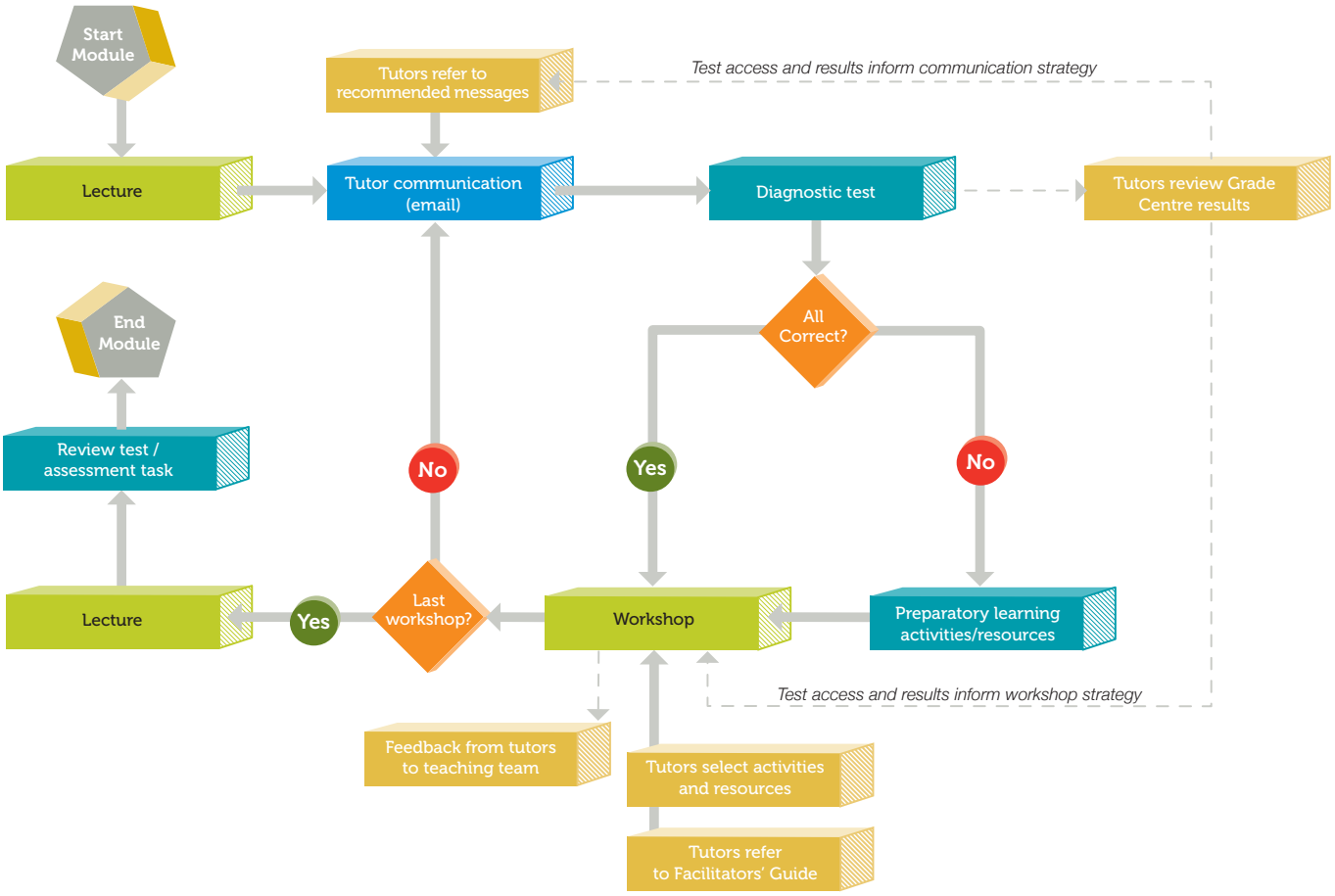
Some members of the teaching team need to have skills in **constructing tests in Blackboard**, and be familiar with **Grade Centre**. It is highly recommended that the diagnostic tests undergo a quality assurance process prior to release – with one or more tutors should login as a student to complete the test).

Instructions/process

The pattern involves the following steps:

- Course coordinator reviews/revises teaching schedule and identifies champions from within teaching team. Approval for load allocation received (1 month prior to semester start)
- Teaching team meets to discuss objectives, process; allocate roles and workload (week 3)
- Teaching team construct diagnostic tests, facilitators guides, workshop resources and share online e.g. Google drive (week 3 to week 9)
- Course material loaded to Blackboard site (week 2)
- First lecture—lecturer briefs students on course outline and expectations (week 1)
- Tutors send out first email to students (week 1 after lecture)
- Students complete first diagnostic test prior to workshop 1
  - Tutors examine Grade Centre results (access, marks)
  - Tutors download Facilitator Guide Workshop 1 and plan workshop
  - Tutors deliver Workshop 1 (week 1)
- Tutors repeat process as per attached flowchart, adjusting communications and workshop plan as required results (week 2 to week 12).

Business Computing I —Module Learning Pathway



Resources

The Google site contains or links to the following resources to support the pattern:

- Flowchart of the learning pathway for a module
- Pedagogy and best practice resources related to the pattern
- Case study of initial implementation of the pattern, including:
  - Extract from *Mobile Learn Suggested Communication and Comments*
  - Example of a diagnostic test
  - Example of a Facilitators Guide
  - Screen capture of Grade Centre results
  - Extract from *Lecture and Workshop Ideas and Feedback*.

The project team has also created an RMIT development Blackboard site: **GLBDB1: Personalising the Flipped Classroom** (to access the site, request instructor access from ITS).

(The Google site, Personalising the Flipped Classroom can be accessed at **https://sites.google.com/a/rmit.edu.au/glbd---personalising-the-flipped-classroom/**).

Reflection

The effectiveness of the pattern will be evaluated by:

- qualitative feedback from students via the tutors
- CES data
- qualitative feedback from the tutors and lecturer.

Acknowledgements

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- A/Prof Joan Richardson, School of Business IT & Logistics
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References

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OLT: Flipped classroom project, UQ, **www.uq.edu.au/tediteach/flipped-classroom/olt-transforming/index.html**

Ah-Fur Lai (Taipei Municipal University of Education, Taiwan) and Deng-Jyi Chen (National Chiao Tung University, Taiwan) 2012, 'Web-Based Two-Tier Diagnostic Test and Remedial Learning Experiment', in *Intelligent Learning Systems and Advancements in Computer-Aided Instruction: Emerging Studies*, **www.igi-global.com/chapter/web-based-two-tier-diagnostic/61977**