Curriculum Design Pattern

Global Learning by Design

Name of Pattern	**Diagnostic Recap**
Date	December 2014

Abstract

This pattern help engage and enhance the students experience when partaking in multiple theory based lectures. Typically lectures that present multiple hours of theory in each session, tend to lose students interest in the subject matter, and therefore fail to grasp key concepts.

To encourage students to engage with the theories and to aid students level of anxiety within the lectures, a diagnostic recap can be introduced using real time online quizzes throughout the lecture series. The quizzes are developed to highlight any gaps or knowledge breaks between lectures. If gaps are identified, they can be addressed at the start of each lecture before moving on to the next topic. This formative assessment approach enables students to move through concepts smoothly, draw comparisons, deepen understanding and ultimately support them for a final exam. Diagnostic recap also provides timely feedback to students, encourages students to self monitor own learning and can be used as a powerful tool to direct and inform professional development of academic and teaching staff.

Rationale

The Diagnostic Recap is designed to test and consolidate new knowledge and give students the opportunity to clarify information. The recap also directs students back to the Blackboard for the associated course; to assist students in finding additional information and resources about the topics.

Learning Context

Classes of all sizes can benefit from this pattern. It focuses on students who partake in heavy face-to-face theory lectures that are conducted in large lecture theatres. It has also proven to work well with large groups who have continuous weeks of theory lectures.

Learning Design

The student experience will be enhanced by:

- Supporting students when moving through different level/ stage/subject matter.
- Providing students with timely feedback to help inform self directed learning

Quiz Development and Configuration

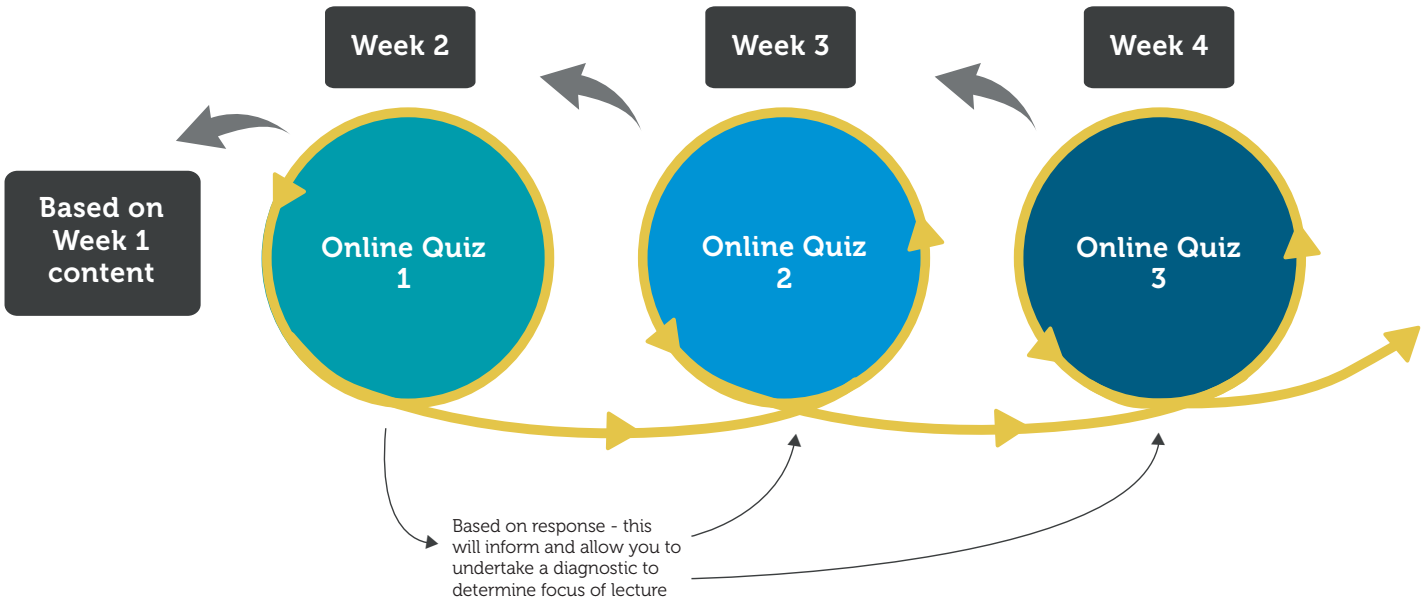
1. Prior to semester - Google Forms are created as a 'Real-time quiz' in preparation for the beginning of semester . Each Google Form contains quantitative and true/false questions that relate to subject matter. (See Google Form Resources)
2. Academic/teacher deploys the Google Forms by using the generated URL and embedding that unique URL into a Blackboard announcement for students to access during the lecture. (See Google Form Resources)
3. In the course Blackboard, ensure each Google Form/ Real-time Quiz is supported by Blackboards time release announcement function, and have it set to release at the start of each lecture class.
4. Ensure that students are informed that they need to bring a laptop or mobile device into the lectures to participate in the interactive activity.

The Lecture

- At the beginning of each lecture, the Academic/teacher opens Blackboard on the room projector and directs students to the Google Form /Real-time Quiz link.
- Students undertake the quiz by clicking on the link found in Blackboard and submit their responses.
- Once the time allocated for students to respond is finished, the Academic/teacher displays the analytical overview on the projector screen and highlights the results from the quiz.
- Based on the responses, the teacher can determine what the gaps are in the student's' knowledge and recap the theories needed before moving to the next theory.
- This process can be repeated as appropriate throughout the semester, to assist students in building their knowledge and confidence in preparation for an exam or final assessment.

NOTE: It is recommended to consider the following:

- Keep each quiz to no more than 10 - 15 questions, and set a time limit to answer and submit
- Avoid short answer (Open text) questions when using this pattern
- Ensure the Google Form is set to Anonymous for greater student participation during the lecture
- Encourage every week for students to bring their mobile devices to the lecture and highlight the benefits they will experience when participating in this activity.



Critical Success Factors

TECHNOLOGY

Knowledge of Google Form technology
Mobile devices for quizzes in lectures

Conditions

Successful implementation of this pattern requires the following critical success factors:

- Working knowledge of using the Google Form technology (See Resources)
- Students to have mobile devices (Laptops, smartphone and tablets) to respond to quiz in the lecture theatre

Resources/Technology

- How-to: Set time release announcements in Blackboard (QRG)
- How-to: Create a Google Form (Getting Started Video)
- How-to: Take the Next Steps (Google Form Advanced Video)

Case Studies

Diagnostic Recap - Case Study (School of Economics, Finance & Marketing)

Outcomes

The recap is designed to test and consolidate a student's knowledge. Students are more engaged with the course content and feel comfortable to move on to new topic. It also promotes self-directed learning when students receive timely feedback to enable progress with the course content.

Evaluation

Refer to - 'Pattern Evaluation template'

Related Category

#Feedback #InteractiveLectures #Quiz #FormativeAssessment #SelfDirectedLearning #ProfessionalDevelopment

References

Formative Assessment

http://www.ncte.org/library/NCTEFiles/Resources/Positions/formative-assessment_single.pdf

Wylie, EC, Gullickson, AR, Cummings, KE, Egelson, PE, Noakes, LA, Norman, KM, & Veeder, SA 2012, '*Introduction to improving formative assessment practice', in Improving formative assessment practice to empower student learning*, Corwin Press, Thousand Oaks, CA, pp. 1-11, viewed 20 July 2015, doi: http://dx.doi.org/10.4135/9781452275437.n1.