

Curriculum Design Pattern

Global Learning by Design

Name of Pattern

Abstract/Snapshot

Whiteboard Races

Students, working in small groups, are given a series of problems in class to solve. Using a whiteboard or poster paper, the groups are required to come up with solutions within a pre-set time frame (e.g. 10 minutes per problem). The problem solving series can be used at various points throughout the semester with an Online Leaderboard used to track group results throughout the semester.

Rationale

This learning activity provides a collaborative learning approach to problem solving.

Learners/Context

Suitable for equation based learning in a tutorial setting and can be used with students at all levels.

Related patterns

None.

Related category

Active learning, analysis, collaboration, group work, problem solving.

Alignment

Provides students with an opportunity to collaboratively learn, analyse and problem solve within a defined time frame.

Instructions/process

Prior to class:

1. Create a set of equation based problems that can be used in the classroom at various points during the semester.
2. Set up an Online Leaderboard using Google Spreadsheet in preparation for the Whiteboard Races - it will include group names, scores and time keeping (see Resources/Technology).
3. Embed the Google Spreadsheet URL in Blackboard by sharing the spreadsheet via a link and copying and pasting the link into your Blackboard site (see Resources/Technology).

In class:

4. Divide students into small groups and establish names for each group. (Note: The group names should not identify individual students.)
5. Assign each group a whiteboard or space in the room. Use either the whiteboards or large poster paper and markers to identify the equation based problem and work together towards a solution as a group.
6. Give students an equation to solve in their groups and advise them of the time limit in which the solution must be achieved. The activity must be capped with a time of completion, e.g. 10 minutes. Teams need to try and work out the correct answer or solution as quickly as possible.
7. Time the activity and record the time in which the problem was solved by each group.
8. Conduct a quick debrief after the activity and encourage the winning team to share their approach to solving the problem.

After class:

9. Populate the Online Leaderboard for the Whiteboard Races with group names and post results - refer to instructions for creating a leaderboard in Resources/ Technology.
10. Post an announcement on Blackboard advising students how to access the Online Leaderboard, and when the next Whiteboard Race will be conducted.

Conditions

Access to timer/mobile device with stopwatch.

Knowledge of and access to Online Leaderboard.

Resources

Whiteboards and whiteboard markers

Large poster paper and markers

Timer/stopwatch (use mobile phone timer)

How to create a Google Spreadsheet: A guide to sharing in Google Apps

(<http://www1.rmit.edu.au/browse;ID=f00b9g7doqodz>)

How to share a Google Document via a link:

(<https://support.google.com/drive/answer/2494822?hl=en>)