Human Scatterplot

Description

The human scatterplot is a quick, visual way for teachers and students to get an immediate picture of students' thinking, as well as the level of confidence students have in their ideas. Students are up and moving as they position themselves on a "floor graph", creating a visual scatterplot of class thinking.

How it improves student learning

Self-assessment and reflection are encouraged and enhanced as students observe others' responses and have to consider their confidence in their own responses. A focus on collaboration is fostered as students work together to clarify understanding so that all students can come to agreement on the answer and increase their self-confidence.

How it informs instruction

- Use it at the beginning of instruction to get initial ideas and motivate students for further exploration.
- Use it during the lesson to find out how students are making sense of information.
- Use it at the end of instruction to uncover remaining misconceptions.
- The teacher receives immediate feedback on the different perceptions students have and their levels of confidence in their answers.
- Students with differing points of view and similar levels of confidence can be paired to defend their point and question each other.
- Students can also be matched to a student with a similar point of view but higher level of confidence to gain information to increase their understanding and confidence level.

How it works

- Develop selected response questions with at least three and no more than four choices.
- Label one side of the room with the choices (A. B. C, etc.). This is the X axis of the graph.
- Label the adjacent wall with a range of low confidence to high confidence. This is the Y axis of the graph.
- Read the question and have students position themselves according to their answer choice and level of confidence in that answer.

Variations

- A paper version can be used instead of a human graph.
  - Pass the graph around the class, have students put their initials at the appropriate place on the graph.
  - This provides the teacher with a written record.
  - Pass the graph around again after students have had further opportunity to explore and investigate the question; students re-initial, drawing a line to connect their previous to new position.

Example of a Human Scatterplot (smileys represent where students stand in the room)

Keeley, Page. Science Formative Assessment 75 Practical Strategies for Linking Assessment, Instruction, and Learning. New York: Corwin P, 2008.