

A REVIEW OF CONCEPT INVENTORIES AS TEACHING AND LEARNING TOOLS

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To be skilful, a teacher should be a master of many talents. He/She must be wise in choosing what to teach, effective in the act of teaching and fair in the design of student assessments. Concept inventories can be and have been used as tools to address all of the former, with learning gains that have been scientifically documented. Molecular life sciences educators can learn substantially from the experiences and the experiments from the educational literature in courses like physics, chemistry geology or astronomy. The presentation will provide an illustrative review on models, methods, experiments and achievements of the application of concept inventories in science undergraduate courses. It will be presented with the goal of providing an introductory framework for the following discussion on how educators can contribute to the development of an international project on Concept Inventories in Molecular Life Science education. The presentation will address audiences with no previous awareness on this type of projects.