

Arguing to Learn



LEARNING
TOGETHER

DESCRIPTION

Argumentation is the means by which we rationally resolve questions, issues, and disputes, and solve problems. Embedding and fostering argumentative activities in learning environments promotes productive ways of thinking, conceptual change, and problem solving (Jonassen & Kim, 2010). Although science educators have focused on the roles of argumentation more extensively than other disciplines, argumentation is an essential way of thinking about any discipline including history, sociology, and mathematics.

We can encourage argumentation in our courses by supporting the development of good reasoning skills, using case studies, role play scenarios, and similar authentic activities to encourage students to develop arguments, and using web-based argumentation templates to facilitate the performance and usage of argumentation (Walker & Sampson, 2013; Andriessen & Baker, 2014).

CAPABILITIES

- Assessment: Essay
- Management: Discussion analytics
- Cognitive Tools: Asynchronous social learning: text based

SAMPLE DESIGN IMPLEMENTATIONS

- Robust Technology: Argument simulations
- Simple Technology: Scaffolded argumentation
- Content Support: Rubrics

LEARNER IMPACTS

- Behavior



Pearson

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SELF-ASSESSMENT INSTRUMENT



| Principle Criteria | Integration (4-5 points) | Exploration (2-3 points) | Consideration (1 point) | Not Applicable (0 Points) | Total Points |
|--------------------|--|--|--|---|--------------|
| Definition | <ul style="list-style-type: none"> Strong emphasis of the requirement of arguments having at least a claim that is supported by reasons Strong emphasis that counterargument should address the pros/cons of the original claim and the counterclaim | <ul style="list-style-type: none"> Some emphasis of the requirement of arguments having at least a claim that is supported by reasons Some emphasis that counterargument should address the pros/cons of the original claim and the counterclaim | <ul style="list-style-type: none"> Poor emphasis of the requirement of arguments having at least a claim that is supported by reasons Poor emphasis that counterargument should address the pros/cons of the original claim and the counterclaim | <ul style="list-style-type: none"> Does NOT use effectively or is not a related activity | = _____ |
| Model | <ul style="list-style-type: none"> Strong application of the steps of argument-driven inquiry (ADI) guide the instructional design of activities Strong emphasis of Toulmin's argument pattern (TAP) components model what students should include in good arguments | <ul style="list-style-type: none"> Some application of the steps of ADI guide the instructional design of activities Some emphasis of TAP components model what students should include in good arguments | <ul style="list-style-type: none"> Poor application of the steps of ADI guide the instructional design of activities Poor emphasis of TAP components model what students should include in good arguments | <ul style="list-style-type: none"> Does NOT use effectively or is not a related activity | = _____ |
| Design | <ul style="list-style-type: none"> Strong application of empirical methods for supporting argumentation in learning environments Strong consideration of existing methods to determine a good fit per the context | <ul style="list-style-type: none"> Some application of empirical methods for supporting argumentation in learning environments Some consideration of existing methods to determine a good fit per the context | <ul style="list-style-type: none"> Poor application of empirical methods for supporting argumentation in learning environments Poor consideration of existing methods to determine a good fit per the context | <ul style="list-style-type: none"> Does NOT use effectively or is not a related activity | = _____ |
| Assessment | <ul style="list-style-type: none"> Strong statement of clear assessment criteria provided to students Strong consideration of individual differences | <ul style="list-style-type: none"> Some statement of clear assessment criteria provided to students Some consideration of individual differences | <ul style="list-style-type: none"> Poor statement of clear assessment criteria provided to students Poor consideration of individual differences | <ul style="list-style-type: none"> Does NOT use effectively or is not a related activity | = _____ |