

Odysseys: Teach Critical Thinking

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General Problem

The most comprehensive assessment of learning among college students found that “45 percent of students show **no significant improvement** in the key measures of critical thinking, complex reasoning and writing by the end of their sophomore years.” Arum and Roska (2011)

A “Solution”: Q&A Forum

Default Moodle Q & A forum “requires students to post their perspectives before viewing others students’ postings. This allows equal initial-posting opportunity among all students, thus encouraging original and independent thinking.”

Advantages

Facilitates out-of-class student discussions.
Allows teacher monitoring of student interactions.

Disadvantages

Knowing who writes what can bias peer reviews.
Students hesitate to critique their peers.
Students are reluctant to admit ignorance to peers.
Grading each student takes lots of teacher time.

Conclusion

Q&A online forums don't promote deep critical thinking: they don't facilitate immediate grading, don't allow for dialog on grades received and don't provide anonymity to the participants.

Contacts

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Odysseys™ is owned by Independent Learning, LLP.
www.facebook.com/pages/Odysseys2sense/195689806136

References

- Arum, R. and J. Rosksa (2011). *Academically Adrift: Limited Learning on College Campuses*. Univ. of Chicago Press.
- Schield, M. (2011). Teaching Statistical Literacy Using Odysseys2Sense: A Unique Web-Discussion Forum. MAA www.statlit.org/pdf/2011SchieldMAA.pdf

Challenge 1: How much math do we really need?
G. B. Ramanathan wrote *How Much Math Do We Really Need?* in the Washington Post. Comment on his answer and give your reasons.

24622 Response to challenge Rating Score 1 — The most essential and important ques...
24356 Response to challenge Rating Score 3.3 — I am under the school of thought th...
24623 Review of 24356 Rating 3.3 Score 2,2,2 — I do agree with the majority of th...
22516 Response to challenge Rating Score 4 — G.V. Ramanathan wrote an interesting...
22637 Review of 22516 Rating 4 Score 1,8,1,5,2 — I thought he sounded a little fru...
22993 Critique of 22637 Rating 1,8,1,5,2 Score 1,996,1,996,1,996 — That is a g...

Your power this Odyssey: 143
Highest power this Odyssey: 610
Power
Refresh
Presentation
Show mine
All posts
Responses only
Full texts
Summaries only

Audience: Teachers teaching critical thinking in large courses, online courses or accelerated courses
Word Mosaic (below): Taken from student comments. Larger font means more frequent comments.



Real Solution: Odysseys

a web forum that promotes critical discourse:

- ❖ All posts are **anonymous**.
- ❖ Real-time **computer-generated** student power.
- ❖ Each post **computer-scored** based on ratings.
- ❖ Ratings **computer-weighted** by student power.
- ❖ Students can rate and comment on all posts.

Odysseys2sense™ at www.odysseys2sense.com

Other Benefits

- ❖ Risk-taking in thinking.
- ❖ Peer learning and teaching.
- ❖ Immediate feedback, even in large classes.
- ❖ Dialog about evaluation.
- ❖ Diminished instructor time.

Student Responses

- 73 students in 7 classes (Fall 2010):
- ❖ 63% found it “valuable”
 - ❖ 70% said it improved their critical thinking
 - ❖ 75% preferred *Odysseys* to written papers
- Positive student comments:
- ❖ Something new, fun and engaging
 - ❖ Instant feedback/scoring
 - ❖ Convenient, straight-forward, anonymous
 - ❖ Thought-provoking arguments
 - ❖ Involved critical thinking, learn from others
 - ❖ Able to critique others