# 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

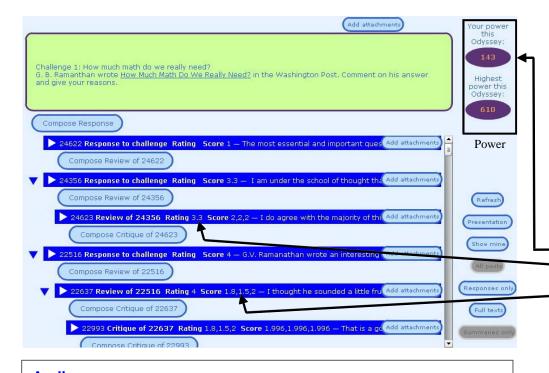
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#### References

Arum, R. and J. Rosksa (2011). Academically Adrift: Limited Learning on College Campuses. Univ. of Chicago Press. Schield, M. (2011). Teaching Statistical Literacy Using Odyssevs2Sense: A Unique Web-Discussion Forum.

MAA www.statlit.org/pdf/2011SchieldMAA.pdf



**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<sup>TM</sup> at <u>www.odysseys2sense.com</u>

## **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