

# The Interactive Graphing Object - Compiled Evaluation Report

Two peer reviewers rated each of the following evaluation items. The results below show the averages of their ratings, ranging from the lowest of one star (★= Strongly Disagree) to the most favorable rating of 5 stars (★★★★★=Strongly Agree). A third reviewer gave only written comments.

## Interface Design

1. The interface is easy to learn how to use.	★★★★★
2. The IGO icons, font layout, and text sizes are appropriate.	★★★★★
<b>Rating for The Interface Design*</b>	★★★★★
3. Comments about the Interface Design (Optional): Reviewer 2: Looks clean and seems to work clearly	

## Usability (Designing Questions, etc.)

4. The IGO has a clear set of instructions which support the user's needs well.	★★★★★ <sup>1/2</sup>
5. Manipulating and entering content into the IGO is straightforward.	★★★★★
6. The design of the IGO supports the integration of multiple media types.	★★★★★ <sup>1/2</sup>
7. Customising a curve (graph) is straightforward.	★★★★★
<b>Rating for Usability*</b>	★★★★★ <sup>3/4</sup>
8. Comments about the Usability (Optional): Reviewer 1: Usability needs to be tested with more authentic users - lecturers who will be likely users	

## Learning Potential

9. The IGO can help improve students' understanding of the concept(s) or topic(s) being questioned.	★★★★★
10. With appropriate question design, the IGO provides opportunities for higher-order thinking with students.	★★★★★ <sup>1/2</sup>
11. Learners are required to use the IGO in an interactive way.	★★★★★
12. The design of the IGO supports the development of innovative questions involving graphical answers to questions.	★★★★★
13. The IGO supports and encourages the creation of highly customisable feedback for students.	★★★★★ <sup>1/2</sup>
14. The Learning Object has Interdisciplinary applications (i.e. is flexible enough for a variety of content domains).	★★★★★ <sup>1/2</sup>
15. I would consider using this tool in the future for my students and/or recommend the IGO to colleagues.	★★★★★
<b>Rating for The Learning Potential*</b>	★★★★★ <sup>1/2</sup>
16. Comments about the Learning Potential (Optional): Reviewer 2: The learning tasks build around the IGO will be the critical elements in creating a high quality learning outcome	

## Quality of the LRC Record

17. Clear information regarding how to obtain a copy of the IGO is given.	★★★★★
18. The technical requirements detailed in the LRC are accurate.	★★★★★ <sup>1/2</sup>
19. The educational aims/goals described in the LRC accurately describe those of the IGO.	★★★★★
20. The generic, customisable nature of the IGO is clearly identified in the LRC record.	★★★★★ <sup>1/2</sup>
21. Overall, the information given in the LRC record accurately matches the functionality of the IGO.	★★★★★ <sup>1/2</sup>
22. The author has given enough information for users to effectively and efficiently use the IGO.	★★★★★ <sup>1/2</sup>
<b>Rating for The Quality of the LRC Record*</b>	★★★★★ <sup>3/4</sup>
23. Comments about the Resource Record (Optional): Reviewer 1: I have not had time to review the documentation properly, but it seems to be clearly written.	

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## General Comments

24. General Comments about the Learning Object (Optional):

Reviewer 1: This seems to be an exceptional peice of work. I hope it can achieve wide use.

Reviewer 3:I have been playing with the tool, but I have rather run out of time and I do not think that I can give a good, realistic assessment, but I have listed some comments bellow.

The interface looks and feels attractive, but the richness can itself be a problem. As with any rich interface the tricky problem is to make it simple for the users. The chemistry question seems complex (to a non chemistry person). It is possible that the student will remain confused, as there seem to be several things to which he/she needs to pay attention. The feedback is the same (no matter how big a mess-up I make of the curve), so it seems not to be sensitive to the problem the student is facing. On a minor point, I found that I can drag the curve (using the adjustment tool) behind the control panel, from which it is difficult to extract it. I am using a laptop (with touch pad), which makes it difficult to draw the curve accurately.

The tool is probably best suited to certain classes of problems, which have a certain level of sophistication, i.e. the student has already mastered the basic concepts in the area. If a student is struggling with basics, the sophistication of the tool might itself be an extra barrier. Identifying the set of problems that the tool is best suited for, and the preconditions for effective use, is a potential area for further investigation.

There is a general problem, as in all exchange of materials, in getting academics to agree on what are (in this case) suitable questions. Normally, lecturers simply impose their questions and materials on their students. My experience is that making these issues public, through collaborative development and sharing, opens up the whole issue of what is appropriate material. This is a very good thing. The question of composing good questions is implicitly opened up by the tool, which makes them public and exchangeable. Discussion on what constitutes good questions could be one very valuable spin-of from the tool.

Sorry for the rushed evaluative comments. Feel free to ignore them if you think them inappropriate. I have had a particularly pressured time over the past 7/8 weeks so that I have not been able to give the tool the time it deserves.

**Overall Rating\***

★★★★<sup>3</sup>/<sub>4</sub>

\*Rounded to the nearest 0.25