

IL Online Self-Assessment Tool for 2nd Year Medical Students

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Source: <http://mcflipper.files.wordpress.com/2010/08/be078984.jpg>



Background

- ▶ Previous provision:
 - Timetabled in curriculum

- ▶ Yr 1
 - Library induction
 - ‘Finding the research’ – coincides with written assignment (Student Selected Component SSC)

- ▶ Yr 2
 - ‘Finding the research’ – coincides with SSC
 - Challenge for teaching – mixed skill / knowledge levels
 - Limited time in timetable



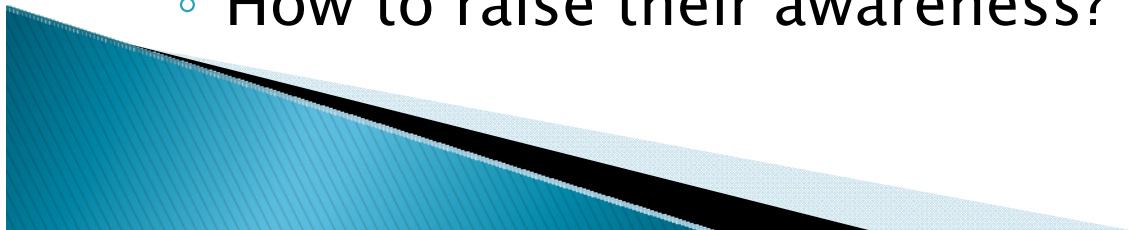
Source: <http://blogs.mysanantonio.com/weblogs/dogblog/>

Background

- ▶ Classroom-based
 - Inflexible delivery
 - No option for online learning

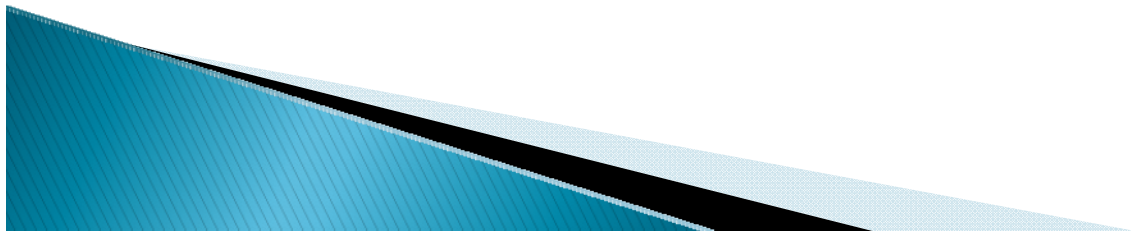
- ▶ Misses some students completely

- ▶ Students' written assignments
 - Improve quality of sources cited
 - How to raise their awareness?



Background

- ▶ Revised provision:
 - Timetabled in curriculum
- ▶ Yr 1 – **as is**
- ▶ Yr 2
 - Online IL self–assessment tool
 - Optional ‘Finding the research’ tutorials
 - Introduced in “preparation for SSC” lecture with Academic staff



- ▶ Online assessment tool
 - Developed using DecisionSim
<http://www.decisionsimulation.com/>
 - From University of Pittsburgh – licensed

- ▶ Used by our e-Learning unit
 - Problem-based learning for the medical curriculum
 - Generation 4 project
 - <http://www.generation4.co.uk/>

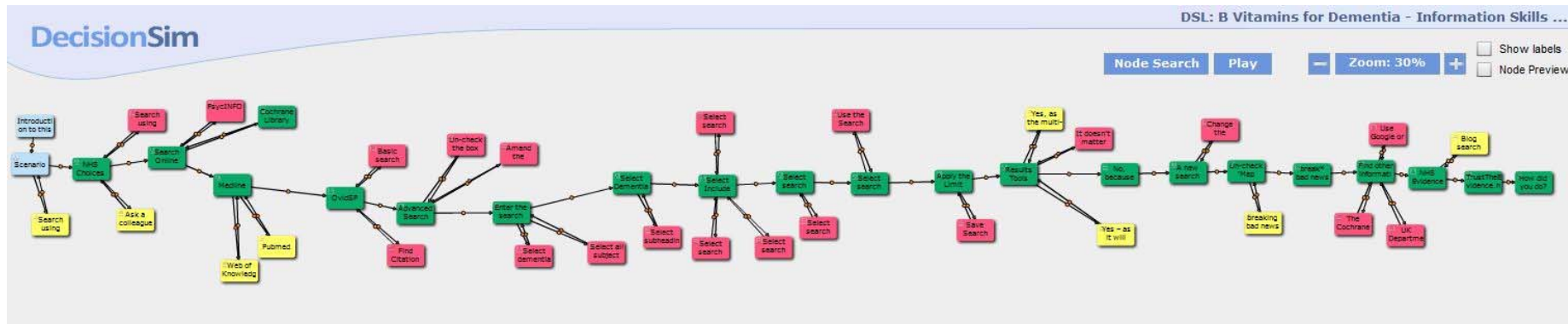


DecisionSim

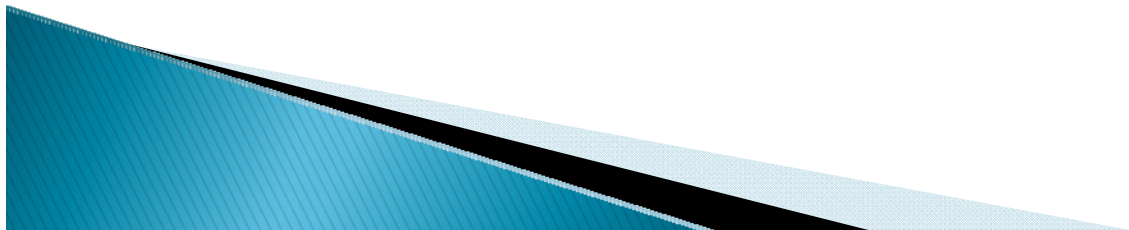
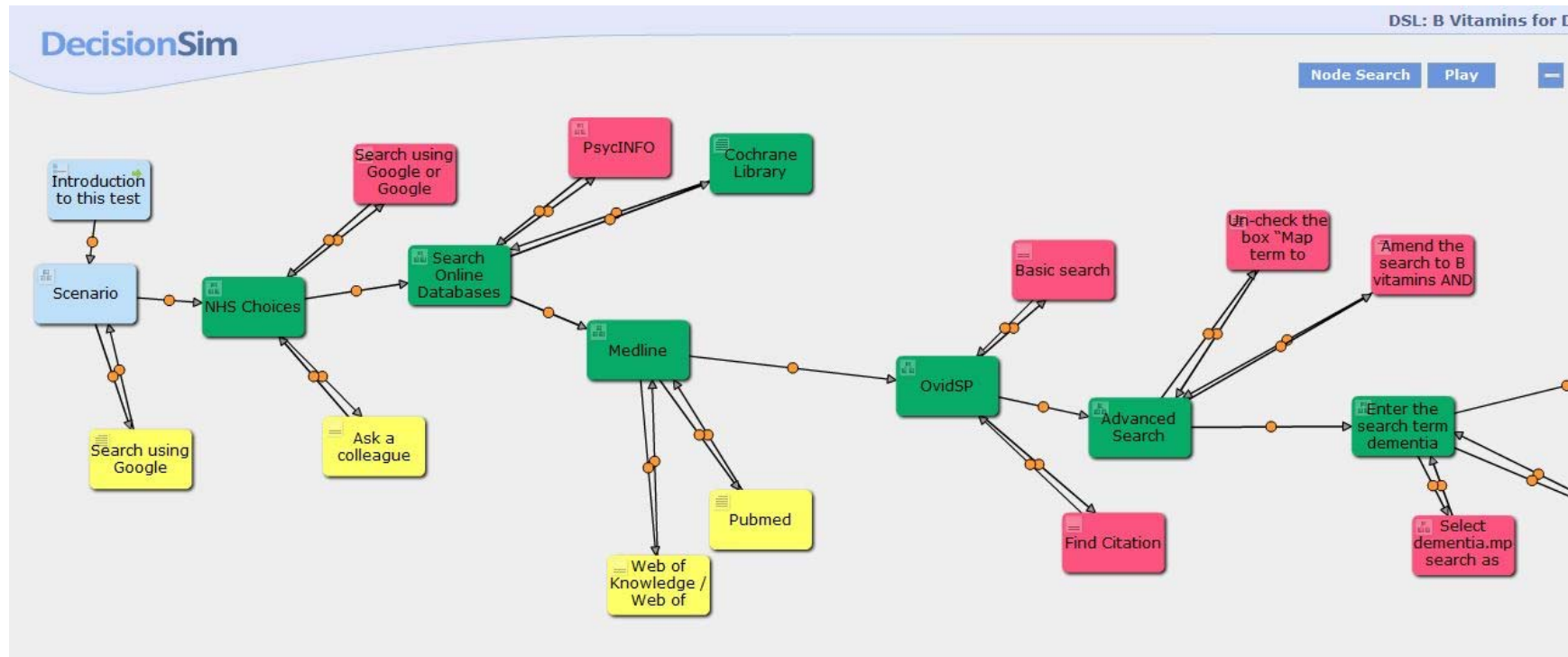


DecisionSim – features

- ▶ Create a case around a scenario



- ▶ Different types of ‘questions’ at each node
 - Narrative
 - Branching
 - Multiple choice
 - Inquiry
- ▶ Incorporate different media eg images, audio, video, text
- ▶ Score selections
- ▶ Straightforward to use



Online self-assessment tool

- ▶ Uses a medical scenario
- ▶ Asks questions related to various types of information needed for the scenario
- ▶ Provides feedback on choices and a score
 - Learning as well as assessment
- ▶ 20 questions; 20 minutes to complete ...
- ▶ Easy to use; short and concise
- ▶ Formative; anonymous; not compulsory
- ▶ View here: <http://tinyurl.com/lilac2011>



Score

0

Introduction to this test

Session description

A scenario is described relating to a medical condition and proposed intervention. You want to find more information or evidence to inform your own opinion on the efficacy of this intervention.

Using an online tool, you will use your information skills to select the steps you would take to search for and locate relevant information. At each step you are presented with a range of choices from which you make your selection.

Feedback is provided based on the choices you make including a score:

- + 5 for a correct choice; you will lose points for incorrect or poor choices
- You will score 85 when you complete the test if your first choice is correct for all the steps

Please note that all your responses and results are anonymous.

Why it is important

The effective use of online search tools to locate research literature is a key lifelong skill for researchers and clinicians.

This online exercise will test your information skills and help you to assess whether you require further training. To receive further training, you *must book a place* on one of the "Effective Literature Searching" Tutorials. Dates, times, and location are shown in the Semester Three Timetable. Details for how to book a place are given in your weekly handbook, in the session outline for these Tutorials.

Before you start the test, please rate your information skills, ie, how proficient are you in finding research articles and authoritative websites for a health topic.

Select one from the choices below:

-
- I feel my skills are lacking
 - I feel fairly confident in my ability to find information I need
 - I feel confident in my ability to find the information I need

 Start the test

Case History



Introduction to this test

Score

0

Scenario

You are a GP and have recently been asked by an elderly patient whether they should take Vitamin B supplements as they have heard in the news that a study shows it can delay the onset of dementia.

You want to find this research and any other evidence which supports these findings.

As it sounds like it is a very recent study, you would also like to see how it is being reported in the news as you think it is likely that other patients may well question you on it. Further, it would be useful to find any comments from your professional colleagues on their opinion of the study.

You decide the first thing to do is to find the news report or reports relating to this study. How would you do this?

- ▶ Use the NHS service "Behind the headlines"
- ▶ Search using Google

Case History

Introduction to this test

Scenario



Case History

Introduction to this test
Scenario
NHS Choices
Search Online Databases
Medline
OvidSP
Advanced Search

**Advanced Search**

Advanced search is the recommended option as it gives you the most powerful search features.

You remember from a training session that your tutor recommended that you spend some time planning a search to identify the important concepts ie search terms for your topic. However, you are a bit short of time so you decide to enter in the Search box:

B vitamins dementia

The keyword option is selected; and the check box "Map term to subject heading" is selected.

You click the Search button and see the following error.

The screenshot shows a search interface with tabs for Search, Journals, Books, and My Workspace. A red error message states: "Ovid was unable to map your term 'b vitamins dementia' to a subject heading." Below this is a search history table with 0 searches. The table has columns for a checkbox, a number, and a search term. Below the table are buttons for "Remove Selected", "Save Selected", and "Combine selections with:" with options for "And" and "Or".

| <input type="checkbox"/> | # ▲ | Searches |
|--------------------------|-----|----------|
| - | - | - |

Remove Selected | Save Selected | Combine selections with: And Or

What do you do next?

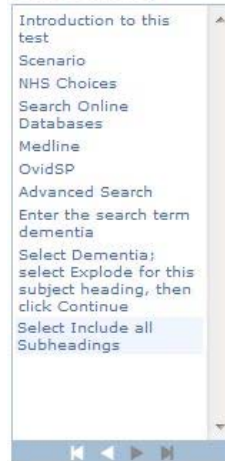
- ▶ Un-check the box "Map term to subject heading", and re-run the same search
- ▶ Amend the search to B vitamins AND dementia
- ▶ Enter the search term dementia

Select Include all Subheadings

Yes, this is the recommended choice. Generally, especially at the beginning of the search process, it is better not to narrow a search by selecting one or more subheadings as you may exclude articles that are of interest.

You click continue and return to this Main Search page.

Case History



| Searches | Results |
|---------------|---------|
| exp Dementia/ | 62749 |

Save Selected | Combine selections with: And Or

You then repeat these steps but this time using the search term B vitamins.

You also decide that you should search using alternative terms related to Dementia, since you remember from a training session that this will help to ensure that you retrieve all relevant articles. It is always possible that relevant articles have been indexed by different, but related subject headings.

So, again you repeat the search steps for the terms Alzheimer's Disease and Cognition Disorders

You now have the following search results.

| # ▲ | Searches | Results |
|-----|--------------------------|---------|
| 1 | exp Dementia/ | 62749 |
| 2 | exp Vitamin B Complex/ | 38467 |
| 3 | exp Cognition Disorders/ | 33429 |
| 4 | exp Alzheimer Disease/ | 37578 |

What would be your next step?

- ▶ Select search steps 1, 3 and 4, and Combine selection with OR
- ▶ Select search steps 1, 3 and 4, and Combine selection with AND
- ▶ Select search steps 1,2, 3 and 4, and Combine selection with AND
- ▶ Select search steps 1,2, 3 and 4, and Combine selection with OR

Score

85

How did you do?

You now need to make an honest assessment of how you performed in this test.

If you had to guess your way through it, or do not feel confident in the level of your information skills then you are strongly advised to book a place on a tutorial (details are in your student handbook).

Competent information skills will help you in completing your written assignments eg SSCs, will make sure you do not miss important references and save you time!

Further, they are an important and key skill for your profession.

Having completed the test, please rate your information skills again. Select one from the choices below:


- I feel my skills are lacking
- I feel fairly confident in my ability to find information I need
- I feel confident in my ability to find information I need

End of Case

-  **View Case Report**
-  **Restart Case**
-  **Close Window**

Case History

selection with AND
Apply the Limit feature for articles in the English Language
Results Tools
No, because databases may have different features eg use a different subject headings
A new search
Un-check 'Map term to Subject Heading' and search again using the phrase 'breaking bad news'
break* bad news
Find other information
NHS Evidence - Health Information Resources
TrustTheEvidence.net
How did you do?



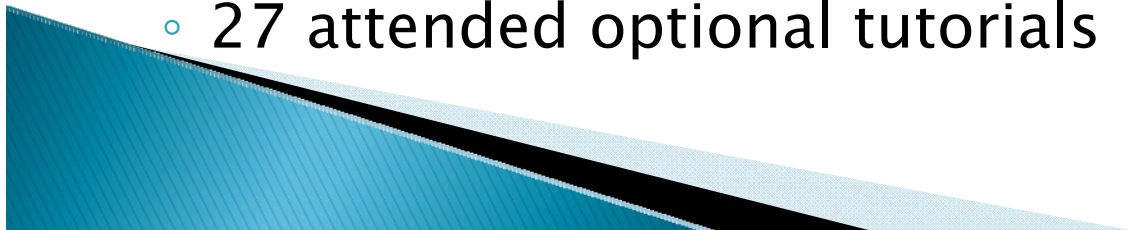
Student engagement

▶ 2010 / 2011

- 66 out of 140 students started the test
- Only 29 completed it – reasons why?
- 26 attended optional tutorials

▶ 2009 / 2010

- Different software – VUE (open source from Tufts University <http://vue.tufts.edu/>) and OpenLabyrinth
- Test was slightly different
- 64 out of 140 students completed the test
- 27 attended optional tutorials



Student results

85 is the perfect score

| 2009 / 2010 | |
|-------------|----------------|
| Score range | No of students |
| < 0 | 8 |
| 1 - 10 | 10 |
| 11 - 20 | 7 |
| 21 - 30 | 5 |
| 31 - 40 | 6 |
| 41 - 50 | 9 |
| 51 - 60 | 5 |
| 61 - 70 | 4 |
| 71 - 80 | 5 |
| 80 + | 5 |
| | 64 |

| 2010 / 2011 | |
|-------------|----------------|
| Score range | No of students |
| < 0 | 0 |
| 1 - 10 | 0 |
| 11 - 20 | 0 |
| 21 - 30 | 0 |
| 31 - 40 | 0 |
| 41 - 50 | 7 |
| 51 - 60 | 12 |
| 61 - 70 | 4 |
| 71 - 80 | 4 |
| 80 + | 2 |
| | 29 |

Student comments

2010 / 11

- ▶ Thank you for offering this session. It was a great opportunity to learn more about stuff I was quite confused about. It's really helpful
- ▶ This tutorial answered all my questions and has really helped me to use OvidSP to its full capacity
- ▶ It was brilliant. I'm glad I came
- ▶ Not (..confident in my skills..) after the test, but made me realise I needed to attend the tutorial. It was a good length and the feedback was helpful
- ▶ Would be good if the test gave a summary of the best steps at the end
- ▶ Very useful! Already I've found lots of articles for my project. Thank you very much
- ▶ If I hadn't done the test I wouldn't have done this training course so it was very useful
- ▶ Very helpful
- ▶ Less of the basics
- ▶ Shorter session. More interactive hands-on session

Conclusions & thoughts for future

- ▶ Broaden range of IL competencies tested
 - Raise student awareness of relevant sources
 - Change opening screen?
- ▶ Other student groups eg MBBS 4 year – graduate entry
- ▶ Make compulsory and not anonymised
 - but still formative
- ▶ Can assess whether completion of test influences:
 - Attendance at tutorials
 - Improvement in quality of sources referenced in assignments
 - Overall improvement in written assignments
- ▶ Other platforms eg mobile?



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[Begin the test](#)

Case Information

Case: Diabetic Foot info skills (1171)
ID: 40009

[Restart Case](#)

Case Pathway

[Review your pathway](#)

Case Score

[Score](#) (0)