



olivia
online virtual information assistant

OLIVIA: Supporting academic integrity through information literacy teaching.

How Imperial College London has managed to get anti-plagiarism teaching into 75% of its departments, using librarians as teachers plus an online course on information literacy, and how your university can get the online course for free.

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How does she work?

Factual information (2006/07)

Number of courses	27
Number of students	5483
Number of teaching hours	338

Practical information

Teaching room requirements

Type of room

You will need a room with a computer for each student

It's possible that available rooms will not hold your complete class and this means that you will have to split the class into at least 2 groups to be taught at different times

Equipment

You will need a computer, mouse, projector and Internet connection, possibly a microphone and P.A. system if you are in a large room or cannot project your voice comfortably

Lesson Times

The number of hours you will need depends upon the session - For example:

Introduction to Olivia & the library - approx 1.5 hour

Internet evaluation - approx 1 hour

Database searching - approx 1.5 hours

Plagiarism & referencing - approx 2 hours

Bibliographic software - approx 1 hour





Remember: Olivia is there to enhance your teaching and also acts as a reference tool for the students. Therefore, you are not expected to cover the whole of Olivia in these sessions. You must however, constantly refer to the units you do not cover in detail to remind students that they are there and how they fit into the information time line of research.

Page | 3 Lesson plans

Below are a list of lesson plans for OLIVIA which can be adapted as required:

Intelligent use of the web

Invisible library

Plagiarism and referencing

Presentations

Below are a list of presentations for OLIVIA which can be adapted as required:

Intelligent use of the web

Search and retrieve

Plagiarism and referencing

Adaptations / flexibility

You will find that you cannot teach the whole IL programme in the hours that you have been allotted by your department. However, Olivia has been created in a way that allows for the programme to be used in a flexible way. For instance:

You can give some units to the students as homework and then ask them to complete a quiz at the following session

Assessment - self test can be changed to quizzes and vice versa

Units within Olivia can be hidden so that students cannot see them before you use them for teaching

Below is the timetable and contents for teaching Olivia to first year undergraduates. Look at the timetable and then look at how the sessions were adapted when required.

Original timetable

Session 1

- Hide Units 2 - 8
- Presentation to introduce Olivia & WebCT
- Hands on - Olivia First time users
- Presentation to introduce the library & different types of information
- Hands on - Olivia Unit 1 & self test





Session 2

- Release Units 2 - 6
- Presentation to introduce indexes & abstracts, databases & search techniques
- Hands on - Unit 4 Olivia - self test
- Presentation to demonstrate how to critically evaluate information on the Internet
- Hands on session - Unit 3 & self test
- Homework - managing & acquiring information - Olivia Units 5 & 6

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Session 3

- Release Unit 7
- Presentation to introduce students to plagiarism
- Hands on - Olivia Unit 7 & self test
- Presentation to introduce students to referencing
- Release Unit 8
- Hands on - Olivia Unit 8
- Assessment - submit referencing quiz

Example 1

Example 2

Student Evaluation

It is essential that you evaluate how successful teaching Information Literacy using Olivia has been for your students.

Evaluation sheets

Always hand out an evaluation sheet at the end of the course. Click here for a copy of the Olivia evaluation sheet.

[Evaluation sheet - UG](#)

[Evaluation sheet - PG 4](#)





Evaluation

1. Executive summary

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The evaluation project collated data from 1,889 on-line and paper returns from students in 10 departments from 2005 onwards. This data contained both quantitative data and some qualitative data, both sets were analysed to obtain feedback on students experiences in using the programme. It picked up information about the value, use and application of the contents of Olivia and also highlighted those modules perceived to be most useful.

Three additional evaluations highlight the recent use of personal response systems in the teaching of plagiarism and referencing, and student's reactions to those sessions

Additionally some comments taken from a set of reflective commentaries relating to both Olivia and the skills associated with Information Literacy are included.

The overall responses were extremely favourable and show that students value the programme highly and understand how it can benefit them across their programmes of study. The responses also demonstrate how the range of modules available are perceived as valuable and the ability to return to the programme at any time is seen as one of its greatest assets.

Finally the project also highlighted some of the areas where the evaluation forms may be positively amended, and suggests other areas for evaluative development.

2. Approaches

The evaluation data collected during and after teaching sessions using Olivia in the current Academic year 2006/07 was collated and the results of key questions analysed. There were a number of sources for this data, electronic on-line evaluation forms for 1,138 returns were reviewed, this is 39% of the total number of students registered as users of Olivia. This covered returns from 10 departments which at that time were part of 3 Faculties (Engineering, Life Sciences and Medicine). There were no returns from the Business Faculty where although students are registered and access Olivia there are no evaluations carried out.

In addition there were a batch of Life Sciences paper evaluation summaries (304 students) from 2005/6 and the comparable data from these was incorporated into the cumulation data from the E-returns.

There were also a set of paper evaluations (305) from the Medicine faculty for 2005/6 and the comparable data from these was also added in to the cumulated data.

Within Civil Engineering there were some detailed reflective Learning Summaries completed by students and where library skills and more particularly Olivia is noted this was reviewed in a separate evaluation. (Section 2)

Further separate evaluations were completed from the responses of students in, Civil and Environmental Engineering (36) Life Sciences (74) and ESE (32) to using the Personal Response Systems as part of the teaching of the referencing and plagiarism sessions at both South Kensington





and Wye Campus. The comparable data was included in the cumulated sheets and comments are noted in Section 2.

Page | 6 3. Results

Data from the evaluation forms, both paper and electronic, produced a range of quantitative information, which was tabulated in an Excel spreadsheet. This data was cumulated both as an overall response but also by Faculty in order to note any significant differences between Faculties. Other questions within the forms included an opportunity for students to comment on what they had learned, how it could be applied and what other topics could be included, these more qualitative results was summarised by main points and also included in the report. These produced the main findings in the report. (Section 1).

The Civil Engineering Learning Summaries outcomes (Section 2) were noted separately as were the ESE, Civil and Environmental Engineering, and Life Sciences, Plagiarism PRS outcomes (Section 3, 4 and 5).

Section 1 - Findings

Questions 1 - 7 were not applicable to the evaluation as they were covering areas such as course, venue, tutors name etc.

Section 1 - Question 7

'How useful were the Olivia sessions?'

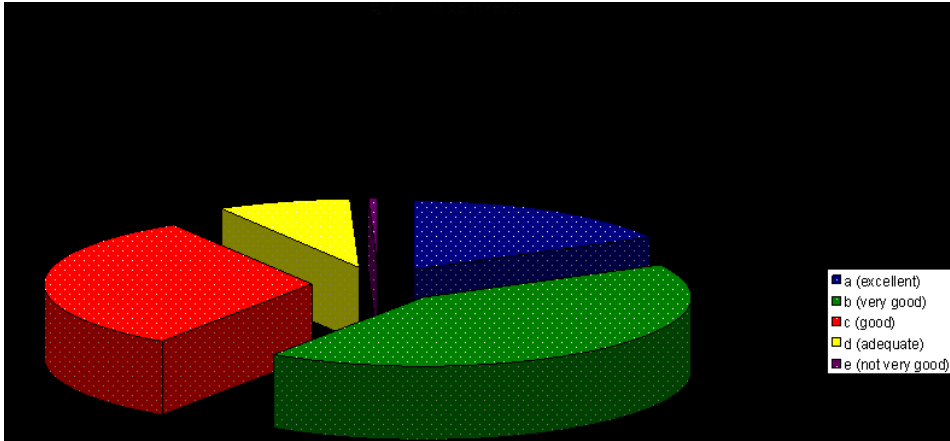
The majority of students rated the sessions as being very good/excellent 61%, 31% rated it as good, 8% as adequate and only 0.8% as poor. This overall pattern was repeated across the Faculty returns, although the balance was slightly less positive in Engineering, with a 3% return rating the sessions as poor. The number of student returns in engineering were much fewer than the other two Faculties so this inbalance may in part be due to the fewer numbers.

N.B. The paper returns from Medicine 05/06 reflect a slightly different balance with students rating usefulness of the sessions less favourably, this seems to have been reversed with the 06/07 on-line evaluations.

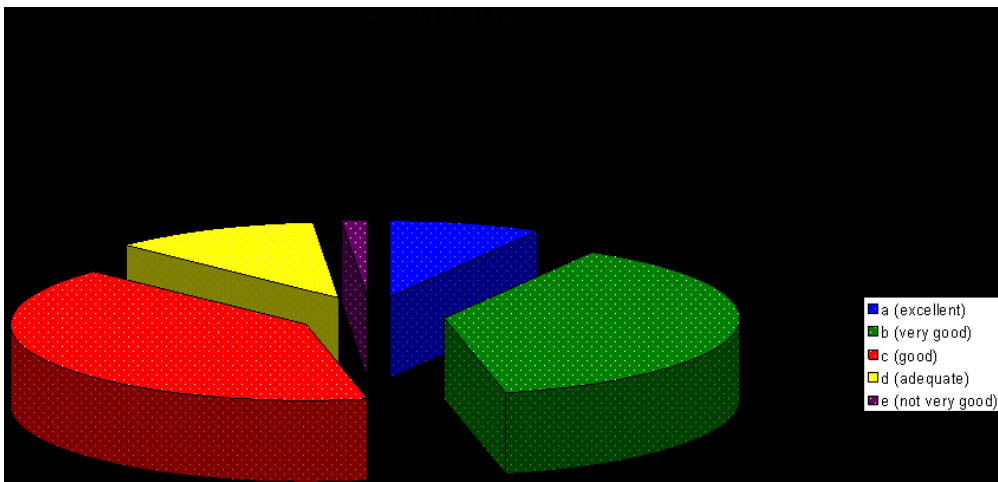
Graphs

- Life Sciences

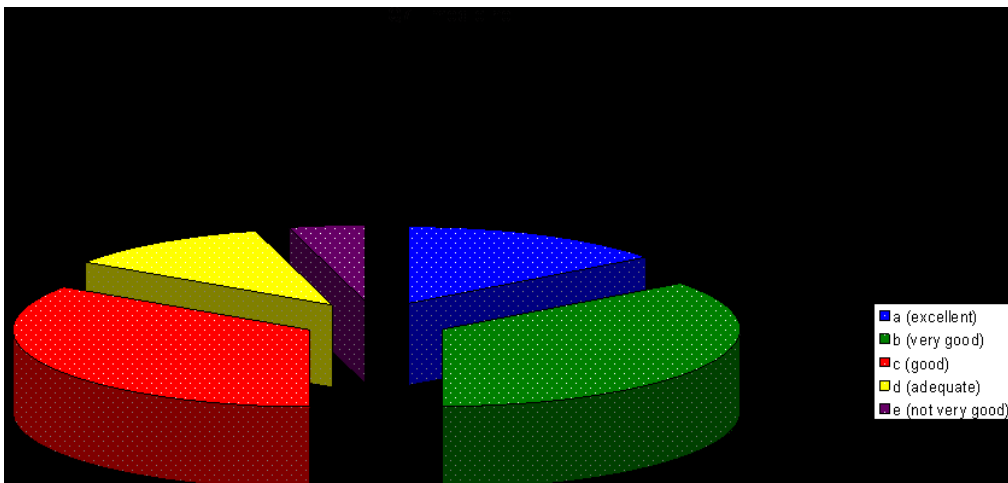




- Engineering



- Medicine

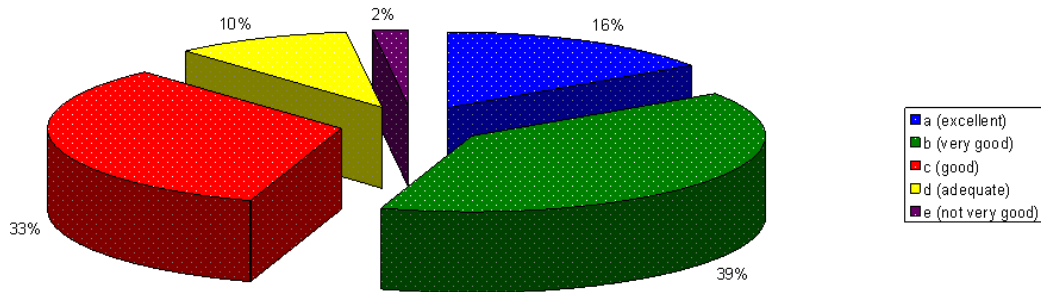


- Overall





Q7 - Overall totals



Section 1 - Question 8

'What have you learned from this session?'

The top four responses for each Faculty are noted below:

Life Sciences	Medicine	Engineering
Referencing 198	Referencing 264	Referencing 31
Databases 154	Olivia 191	Plagiarism 22
Plagiarism 129	Plagiarism 169	Referencing software 17
Olivia 79	Citation 145	Databases 10

This reflects the pattern of teaching of the sessions and the way in which evaluation forms were completed. Where a number of evaluation sheets have been completed, for each session in a programme, the areas covered within that session are obviously those that the students record.

The returns are cumulative and reflect the outcomes across all of the sessions.

N.B. The practical outcomes around referencing seem to be the element that students most commonly note. Other areas also noted include library skills, databases, literature searching and generic use of WebCT and computing resources. Further breakdown indicates that only a very small number of respondents felt they had learned little from the sessions.

'Where could you apply what you have learned?'

The majority of respondents 69% picked up on the expected areas of coursework, including essays, reports, assignments, presentations, PBL reports and lab reports.

A second area that emerged (20%) emphasised the use of the skills in research activities, searching skills applied to looking for articles, publications etc

Third group responded around general library skills including searching the library catalogue and information handling skills (5.4%)





Final area to emerge were those who saw the application to be wider than coursework or research and acknowledged the value of the skills in their future career and the publication process (4.7%)

N.B. It would be interesting to determine in future evaluations how many students saw this wider application but had only noted the more expected and pragmatic response

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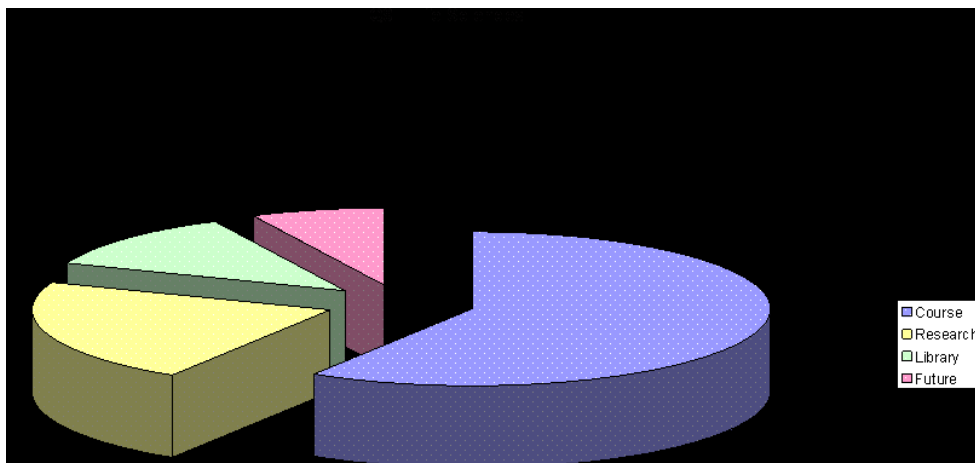
Life Sciences students highlighted library use and future professional life use as almost double the average at 11.8%, and 7.3% respectively, which may have been influenced by more of the evaluations for this group picking up general library sessions

There is some possible confusion when students have noted research activity, when they are really referring to searching or finding information for essays and coursework, it would be perhaps interesting to see if this could be teased out in further work.

It may be useful to offer a menu of options for students to choose when responding to this question, to differentiate between the two concepts.

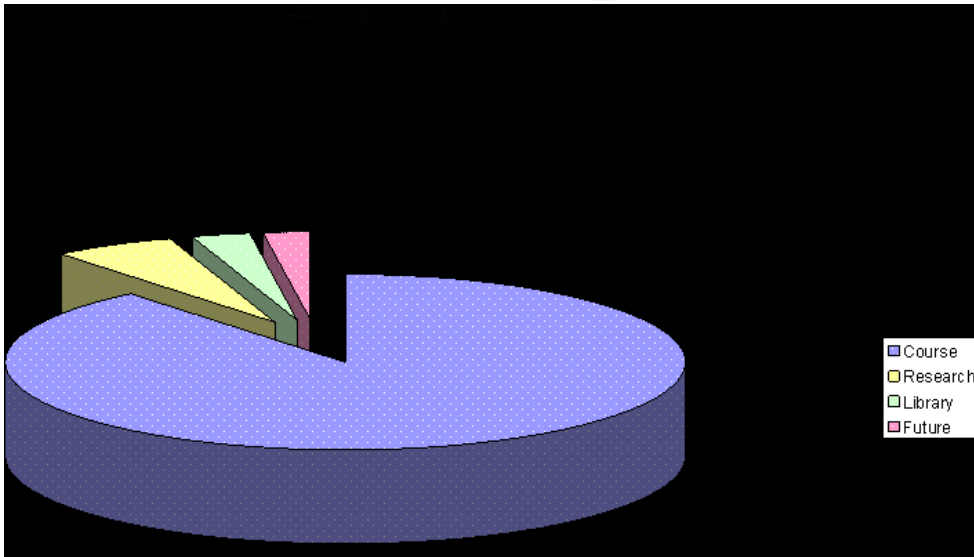
Graphs

- Life Sciences

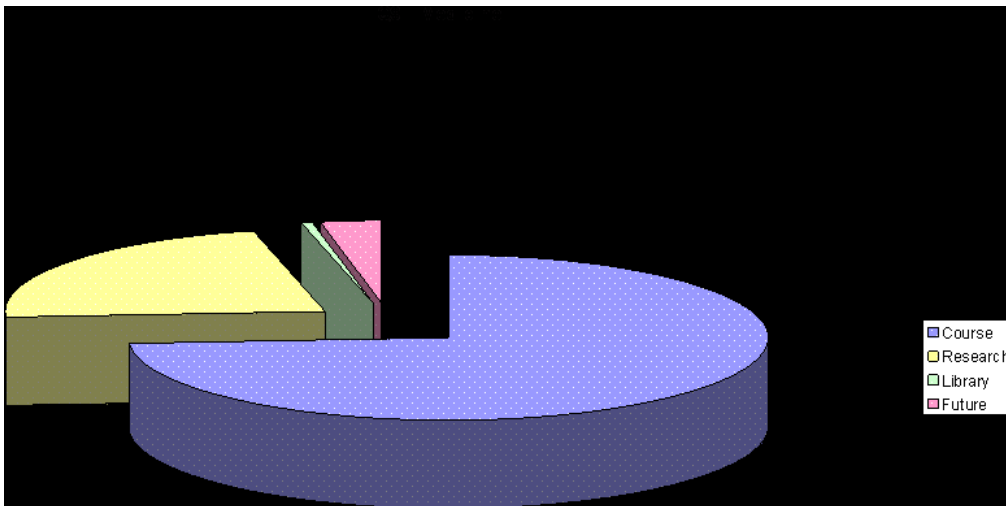


- Engineering



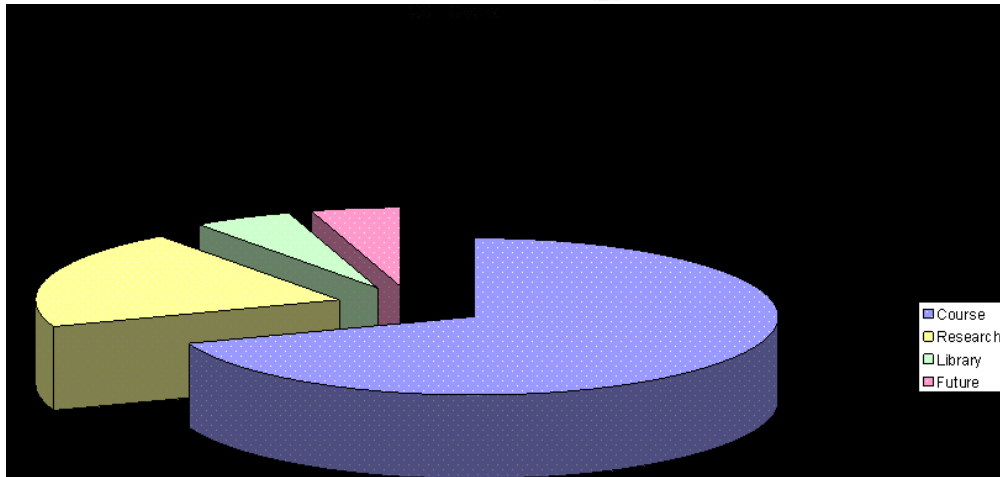


- Medicine



- Overall





Section 1 - Question 10

'How useful did you find Olivia when learning about information literacy?'

Overall the majority of students around 60% found Olivia “very useful or useful”, around 29% found it “fairly useful or ok” and a small percentage 4% found it “not very useful”. In addition another 4% felt that they had not had sufficient use of Olivia to judge..

Faculty data here differed slightly with Life Sciences having a higher than average response on insufficient use so far to judge (7%). This may be explained by the fact that cumulating the responses for each evaluation sheet distributed meant that for Life Sciences separate evaluation sheets were done after each session including for an initial session, most of the “not enough use” responses came from these returns.

Students also highlighted a number of both positive and less positive comments on the usefulness of Olivia and I have noted those below by Faculty.

N.B. There were no keys as to the possible level of usefulness offered for this question and I have noted and cumulated students own use of adjectives to produce the qualitative figures above.

Comments

- Life sciences

Life Sciences

Positive:

Able to refer to again, check 19

Step by step, clear, simple, easy to navigate 13

Advises on reliable sites/sources 6





Less positive:

Bit confusing complicated, missing 6

Simple basic common sense 5

More practice needed 8

- Engineering

Positive:

Able to refer to and go to for help 5

Easy to read well organised 5

More time to practice 1

Less positive:

Already knew 3

Too simple basic 1

Navigation difficult 1

- Medicine

Positive:

Able to refer to again, check 19

Step by step, clear, simple, easy to navigate 13

Advises on reliable sites/sources 6

Less positive:

Bit confusing complicated, missing 6

Simple basic common sense 5

More practice needed 8

N.B. As usual in these sorts of evaluations for some students there was too much information, for others insufficient, for some the sessions were too basic, others too complex. The positive results here are the positive responses considerably outweigh the negatives in number.

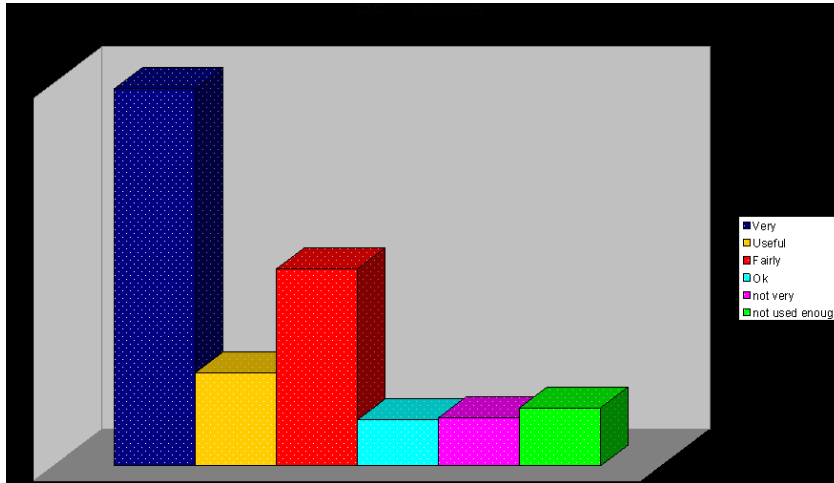




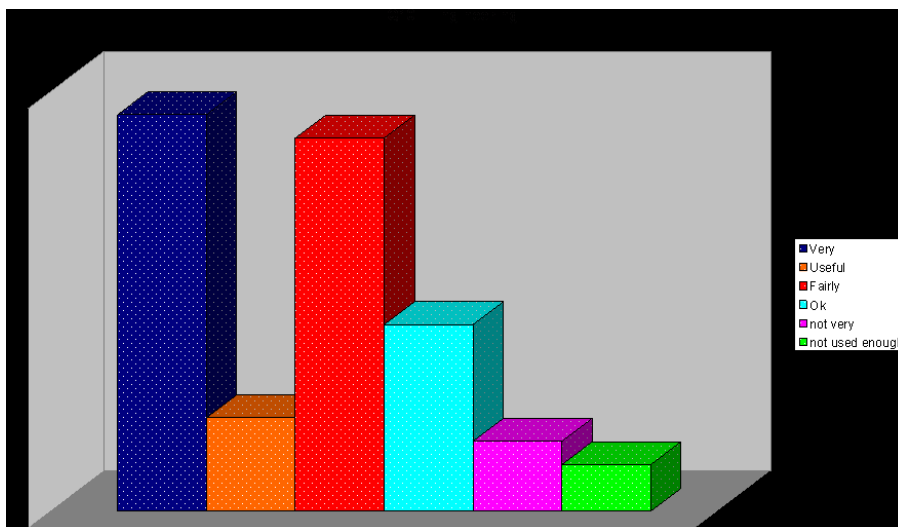
It is interesting to note that the ability to return to the programme following the session was identified by students in all groups as being one of the most useful features. This may reflect the usp which is highlighted in teaching presentations but its positive to see that students have recognised it.

Graphs

- Life sciences

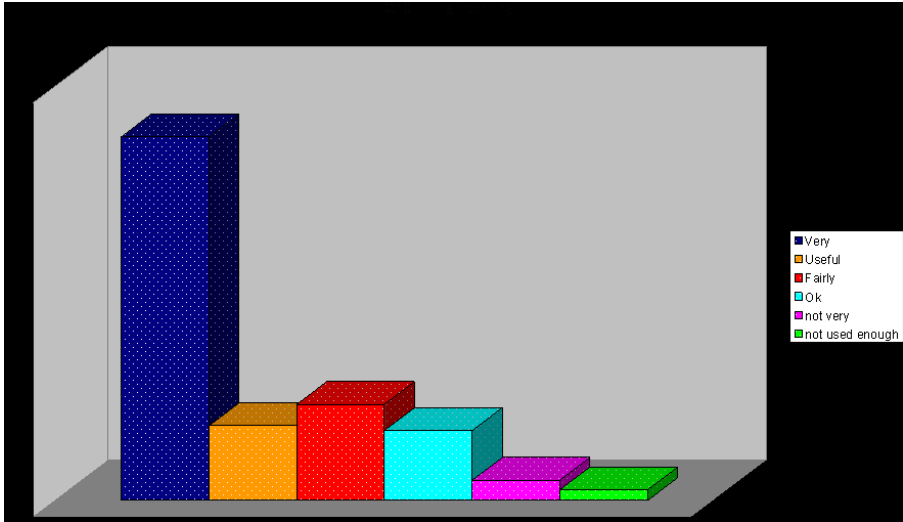


- Engineering

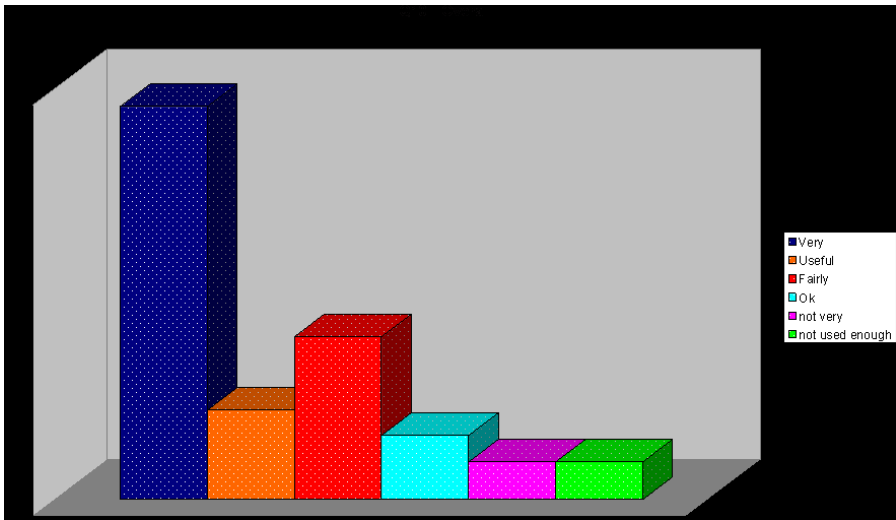


- Medicine





- Overall



Section 1 - Question 11

'Which units in Olivia were the most useful?'

The top 5 units highlighted by students overall were:

Referencing	Unit 8	407
Databases	Unit 4	270
Plagiarism	Unit 7	217
Internet	Unit 3	95
Search and retrieve	Unit 2	85
All units		113





Preferred units by faculty		
Life Sciences	Engineering	Medicine
Referencing Databases Plagiarism Search and retrieve Internet	Plagiarism Referencing Databases Search and retrieve	Referencing Plagiarism Databases Critical evaluation Internet Search and retrieve (05/06 returns only)

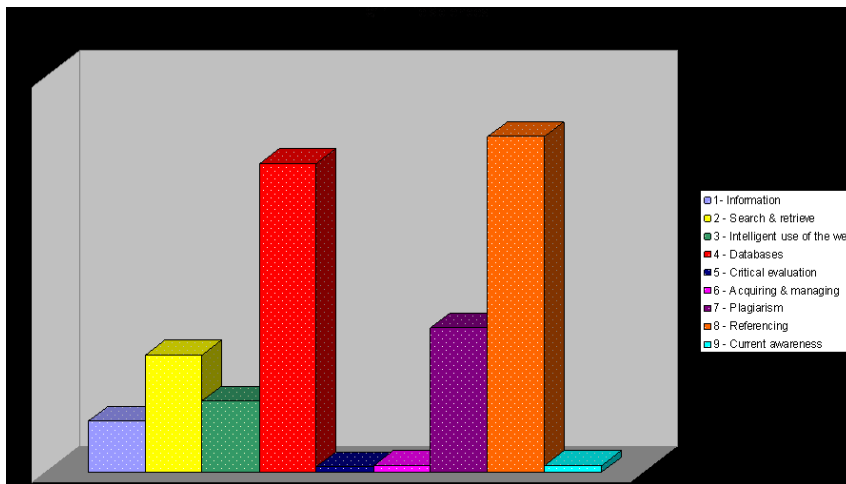
A small number (38) from Life sciences indicated they had not used Olivia sufficiently to comment. See findings above (Question 10) for possible explanation

N.B. *This response tends to reflect the same areas as those in Question 8 and is directly linked to the sessions taught, hence the return for Engineering which only had plagiarism/referencing sessions delivered.*

Most students responding used the unit number rather than name, this possibly indicates they had used and looked at the Unit rather than just put down the title.

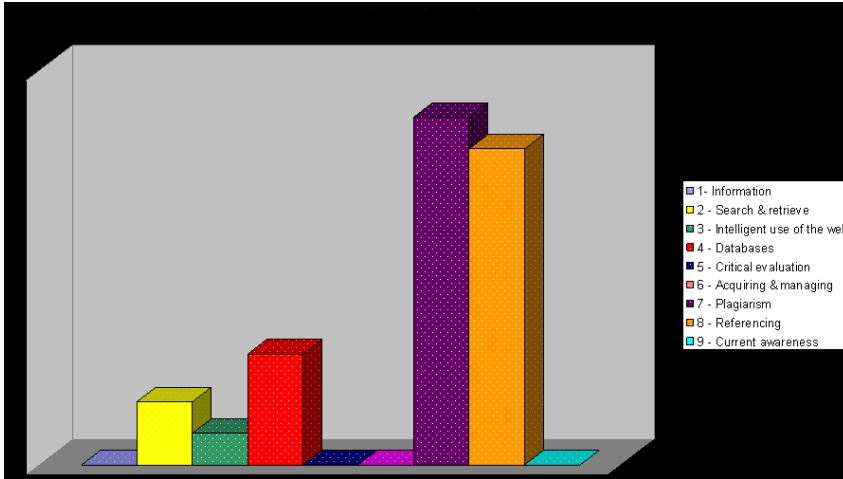
Graphs

- Life Sciences

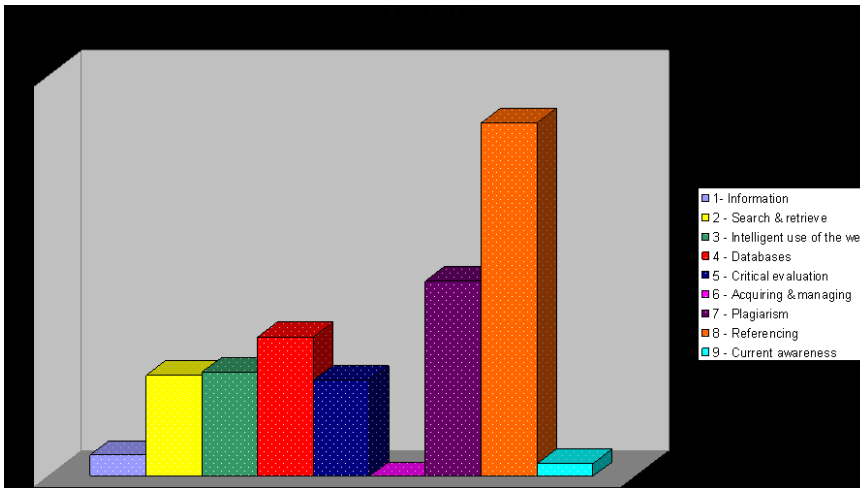


- Engineering



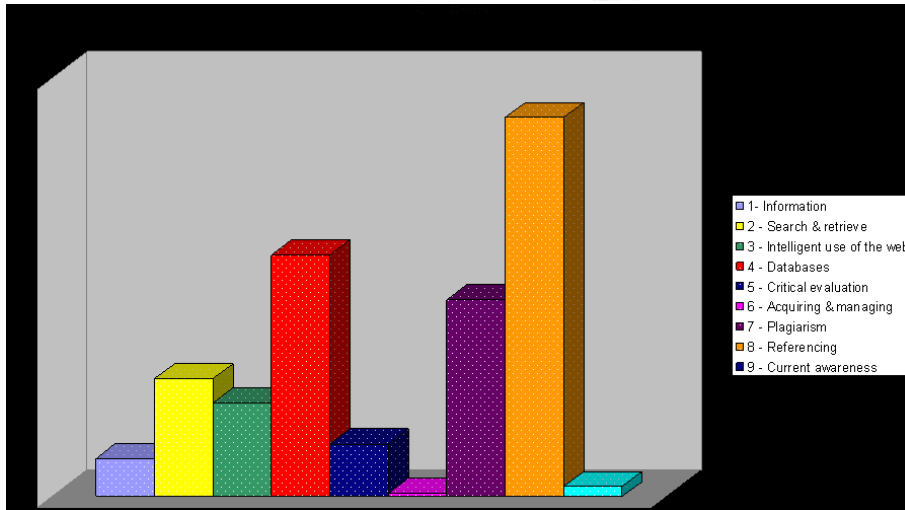


- Medicine



- Overall





Section 1 - Question 12

'The on-line tutorials were useful?'

The overall feeling was that 59.6% of students found them very useful, 35.8% felt they were more useful for those students who did not know how to navigate a specific database and only 4.7% disliked them

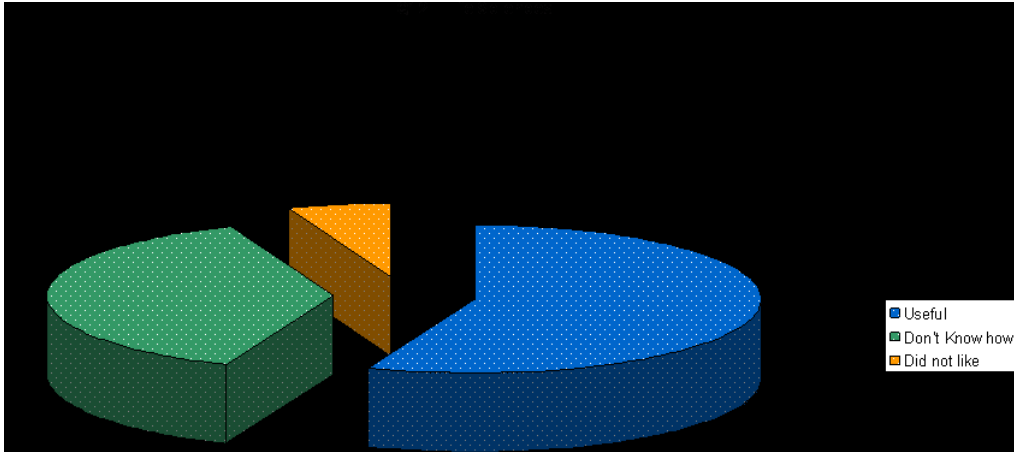
This overall pattern applied consistently to Life Sciences and Medicine, however Engineering students felt they were more useful for students who did not know how to navigate a specific database (63%) and only 31% seeing them as very useful.

N.B. The difficulty with this question lies in the phrasing of the potential responses, it would perhaps be more valuable to either give students a clear choice of scales of value as in question 7 as this would differentiate more effectively, or else go with a personal like/dislike question and offer them a clearer choice. The current muddle of responses makes it hard to compare effectively between respondents choices.

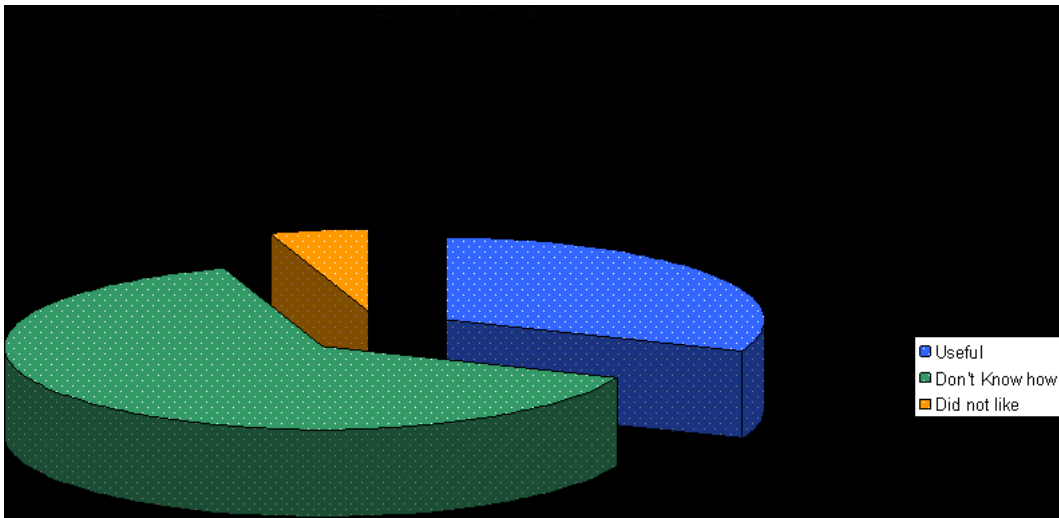
Graphs

- Life Sciences



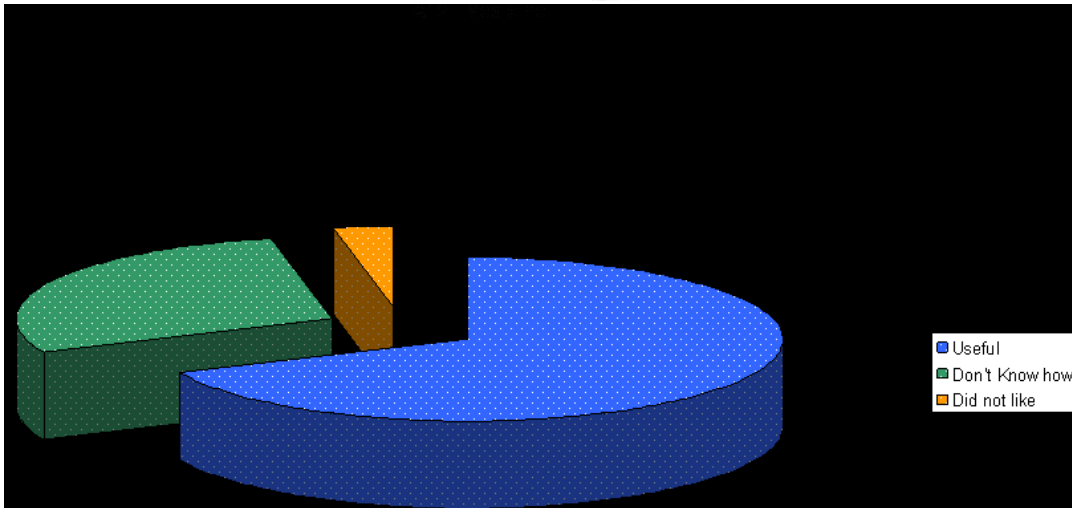


- Engineering

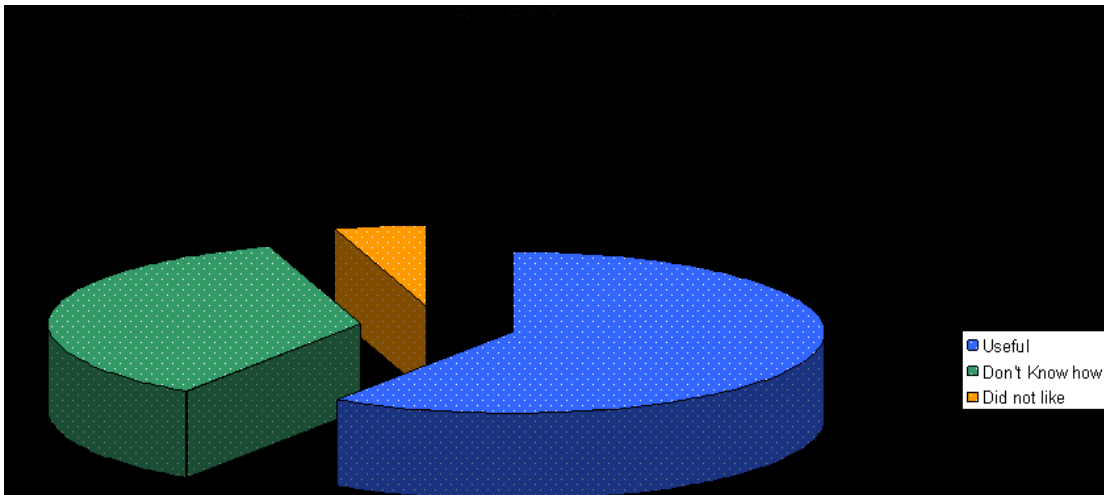


- Medicine





- Overall



Section 1 - Question 13

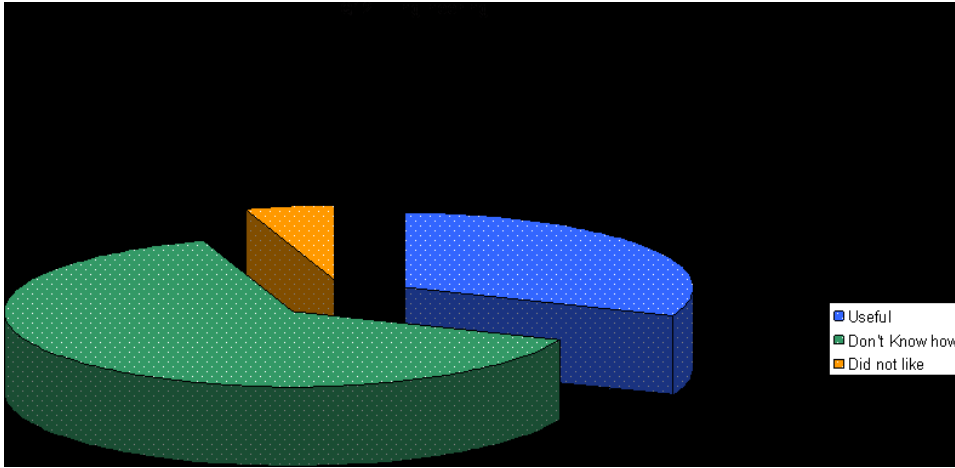
'The self tests were useful?'

Overall there was a very clear response to this question and students across all three Faculties felt that they were useful (77%) as against (22%) who did not.

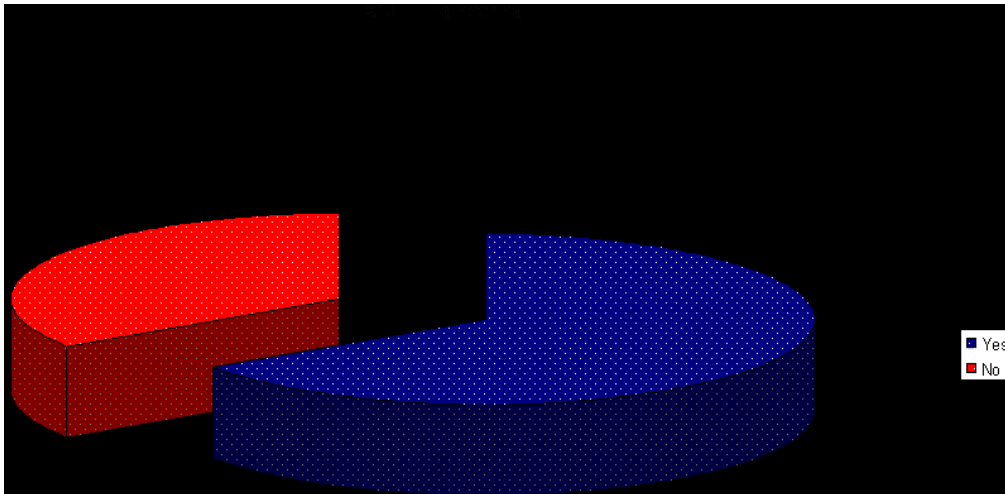
Graphs

- Life Sciences



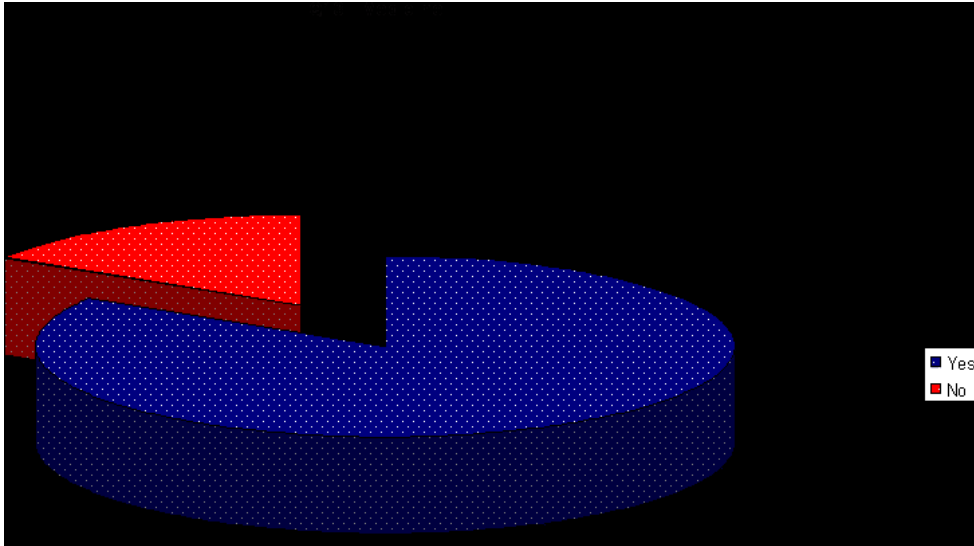


- Engineering

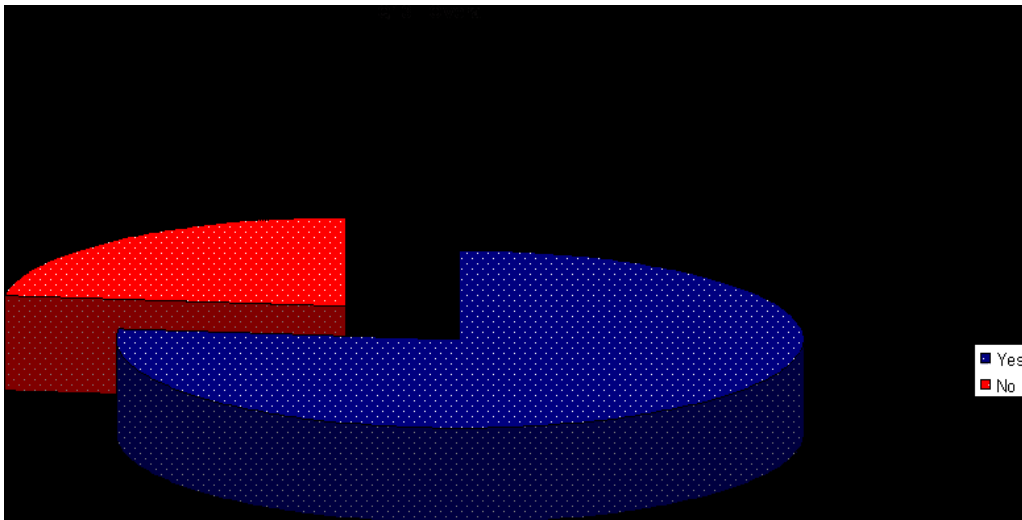


- Medicine





- Overall



Section 1 - Question 14

'Were there topics not included in Olivia that you would have liked to have been covered?'

Overall there was a very clear percentage of students (88%) who felt there was nothing additional that they would have appreciated being covered with Olivia. This ranged from 80% in Engineering to 96% in Medicine.

A small number of students felt they didn't know 2.7%, an even smaller number 1.6% felt they could not comment as they had not yet used all of the elements. (As previously noted above this finding is almost wholly related to Life Sciences students)

Students noted the following topics for additional coverage





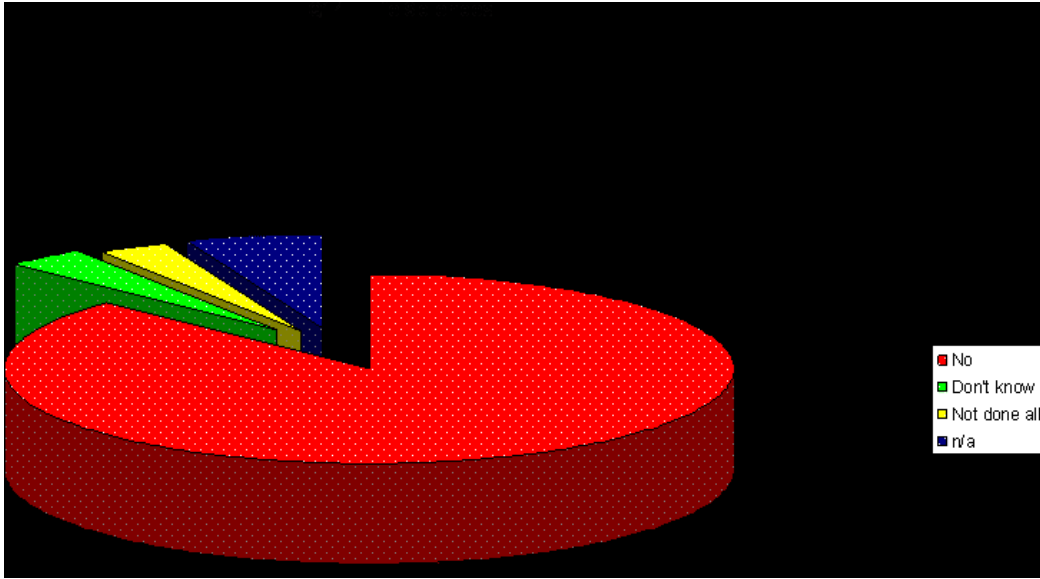
<p>Life Sciences</p> <p>Referencing Software (6), Endnote (2) Referencing (9) Other styles of referencing (1) Find books in library/library information (2) How to sift through information available (2) Access Athens from home Using Web of Knowledge Small seminars Internet resources Handbook/ slide handout</p>	<p>Engineering</p> <p>Referencing software Hands on library searching Web searching examples</p>	<p>Medicine</p> <p>Referencing (5) Other styles of referencing (1) Referencing software(1) Using books and articles on-line Lecture notes Key information handout More details on some issues (not specified) Differences between primary and secondary sources Guidance on topics that are very difficult to normally search Plagiarism</p>
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N.B. Surprisingly the topic that heads all three faculty responses is that of referencing which has already been noted as being the most useful unit, it's interesting to note that the use of referencing software would also be seen as a valuable addition for students in all three faculties.

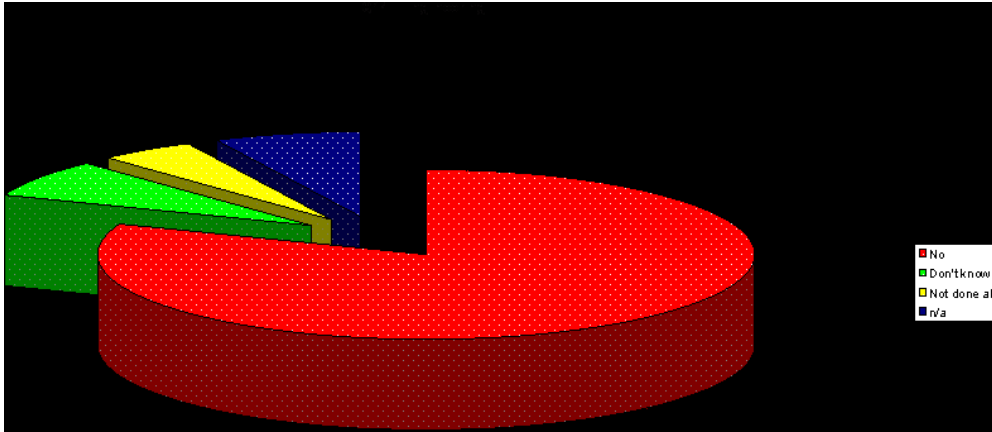
Graphs

- Life Sciences



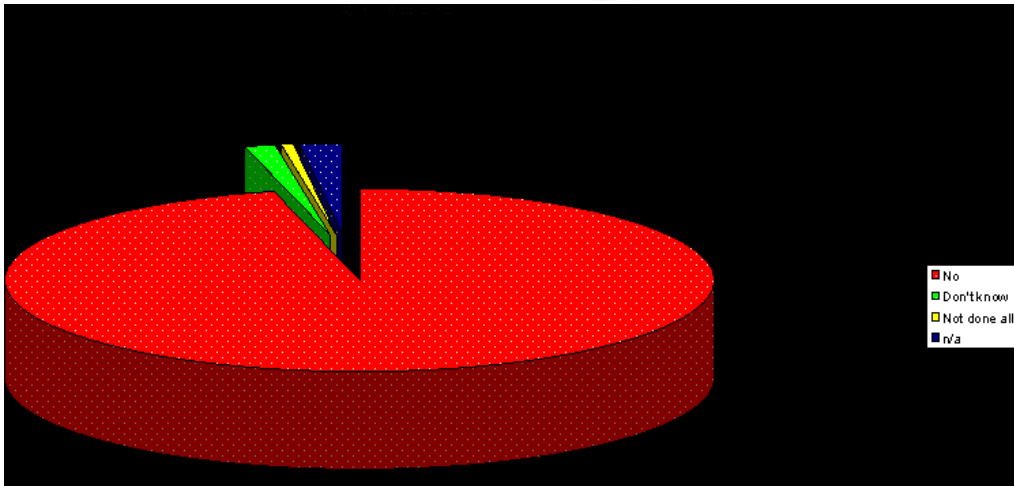


- Engineering

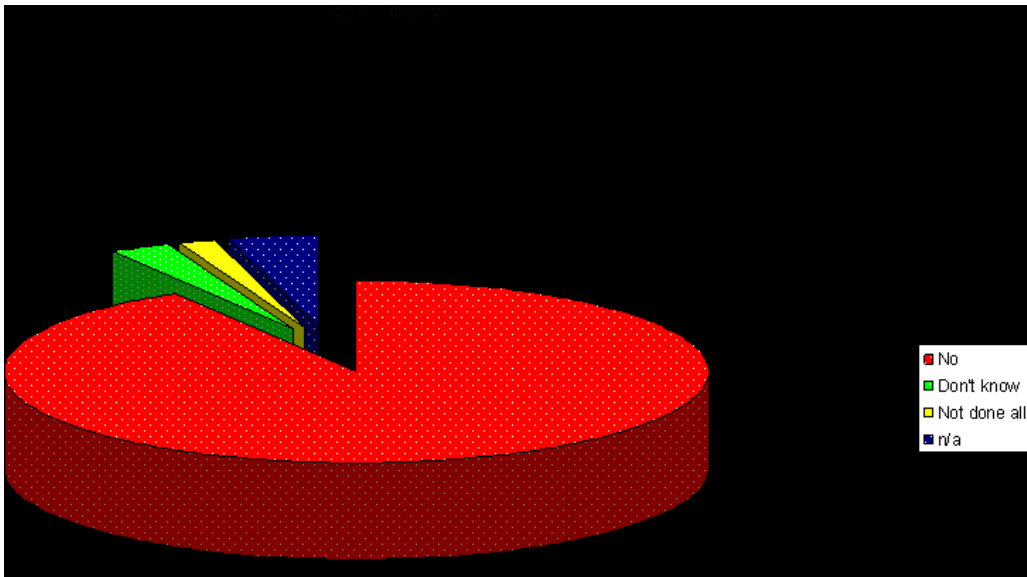


- Medicine





- Overall



4. Comments & suggested actions

Suggested amendments to the evaluation sheet

Question 9

Offer a range of options with a tick all that apply option, which would ascertain if students felt there was a wider value to sessions.

Question 10





Offer a range of levels of value which would make it easier to extrapolate findings rather than free text which it is hard to quantify. Alongside this offer free text space to highlight what the students found most useful.

Question 12

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Re-design question to either clarify if the sessions were useful or were liked.

Evaluation suggestions

consider the value of developing a referencing software unit as this was suggested by students from all three faculties

create a question asking students to self-assess their library knowledge background which may help to put responses in context

consider using some focus group work to follow up some of less positive issues reflected in the usefulness of Olivia questions

ensure that some evaluations are carried out with students from Business Faculty to ensure there is feedback across all faculties.

widen the usage within Engineering faculty to build response numbers from this faculty to ensure more even spread of responses to ensure greater validity in comparison of findings.

Contacts

If you are require further information about Olivia or would like to obtain the Olivia files please contact:

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