

Repurposing with a purpose: A story with a happy ending

Lyn Greaves, Sibel Roller & Claire Bradley

Thames Valley University & London Metropolitan University

OER10, March 2010



Project BL4ACE

JISC Funded - Reuse of Learning Content

TVU working in collaboration with London Metropolitan University to re-purpose existing materials & learning objects into a TVU module covering 'Academic Practice'

Project barriers and enablers

- Institutional inter-departmental working practices
- Copyright Issues

- JISC
- CASPER
- Institution Central Departments

Science case study:

- Year 1 module developed in 2002 for BSc (Hons) Human Sciences
- Aims:
 - To develop critical thinking skills required to study science
 - Also:
 - scientific method
 - history and philosophy of science
 - science *versus* pseudoscience

In the first two years...

- Student numbers < 10
- Many formal lectures, some exercises, some group work, no Virtual Learning Environment (VLE)
- Assessed by coursework and 2-h short answer exam

From 2005...

- Additional programmes tap into module:
 - Premedical Year (higher admissions criteria)
 - FdSc/BSc (Hons) Health and Exercise Science
 - FdSc/BSc (Hons) Forensic Science
- Class size 35-70
- *Blackboard* used as repository for handouts

Issues with achievement and progression

- Premed students generally doing well

But...

- >60% of science students failed module
- Science students in Years 2 & 3 unable to search for scientific information sources, read the literature critically or reference properly
- Googling and plagiarism rife!

The solution?

- Critical Enquiry module in Professional Studies (business, accountancy, law)
- JISC funding in AY07/08 to develop RLOs: Blended Learning for Academic Competence and Critical Enquiry (BL4ACE)

New module: Critical Enquiry Skills for Science

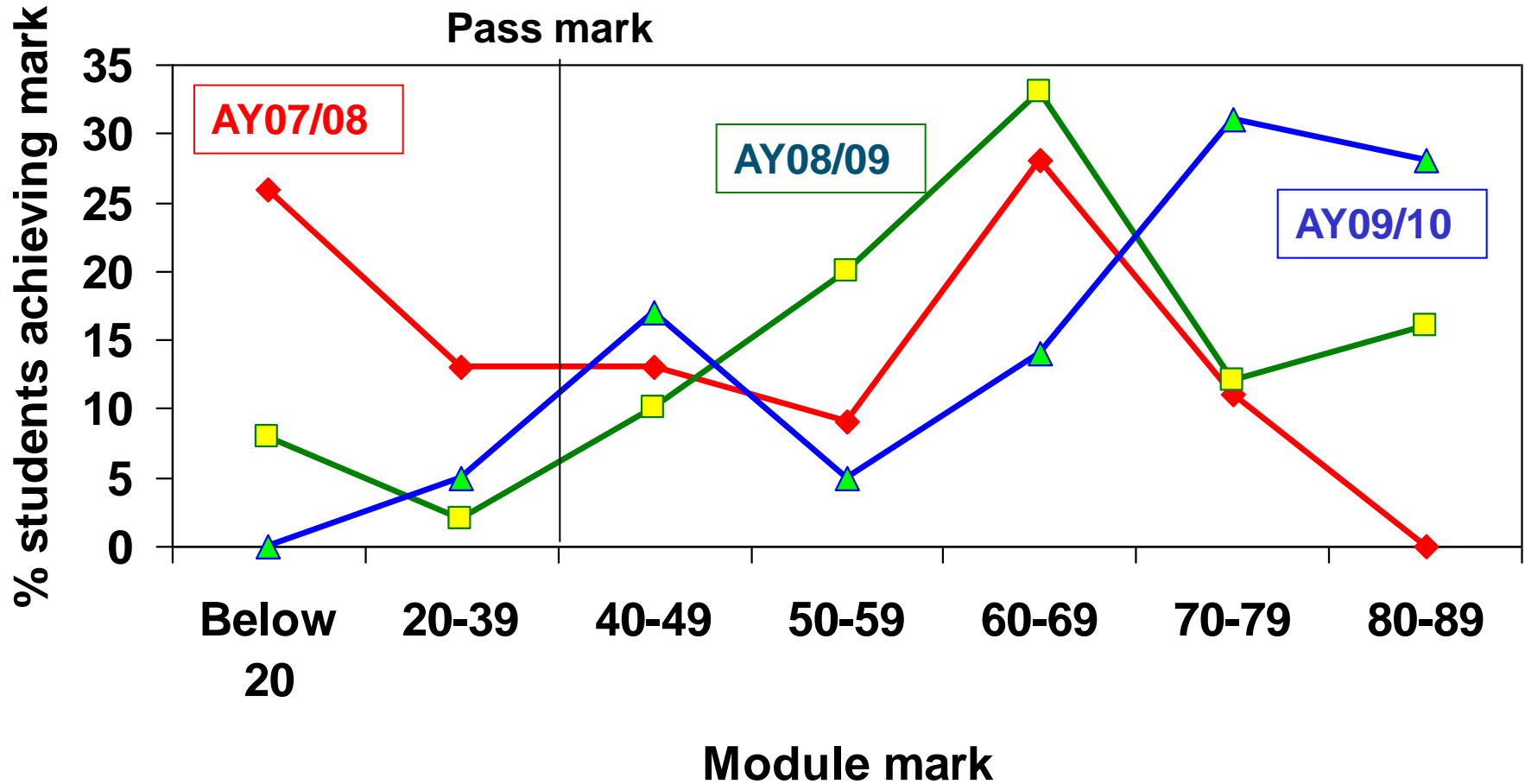
■ Portfolio:

- Reflective essay on strengths and weaknesses in science, 1,500 words
- Literature search on writers publishing on theory of evolution
- Timeline (on a scientific development)
- 3 x 500-word summaries on:
 - a scientific theory
 - a primary research paper
 - an ethics issue

Reusable Learning Objects (RLOs)

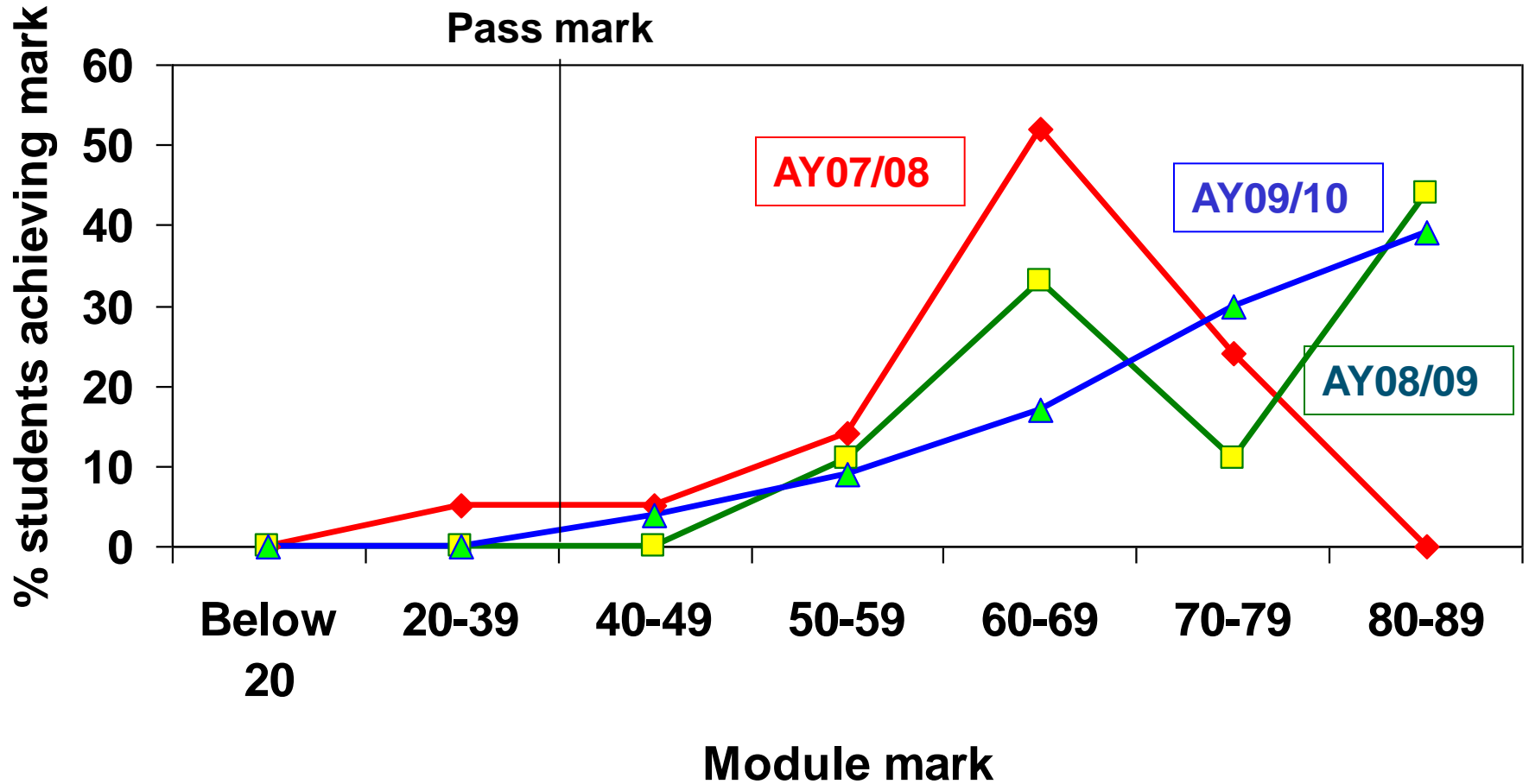
- 3 RLOs on referencing books, websites and journals (RLO-CETL)
- Reflective writing (RLO-CETL)
- The Internet Detective (Intute)
- Help with essay writing (AcademicPhrasebank Manchester)
- Plus:
 - Research in Biosciences (Engage CETL Reading)
 - Helping you plan your career (TVU resource)

Student achievement: all students



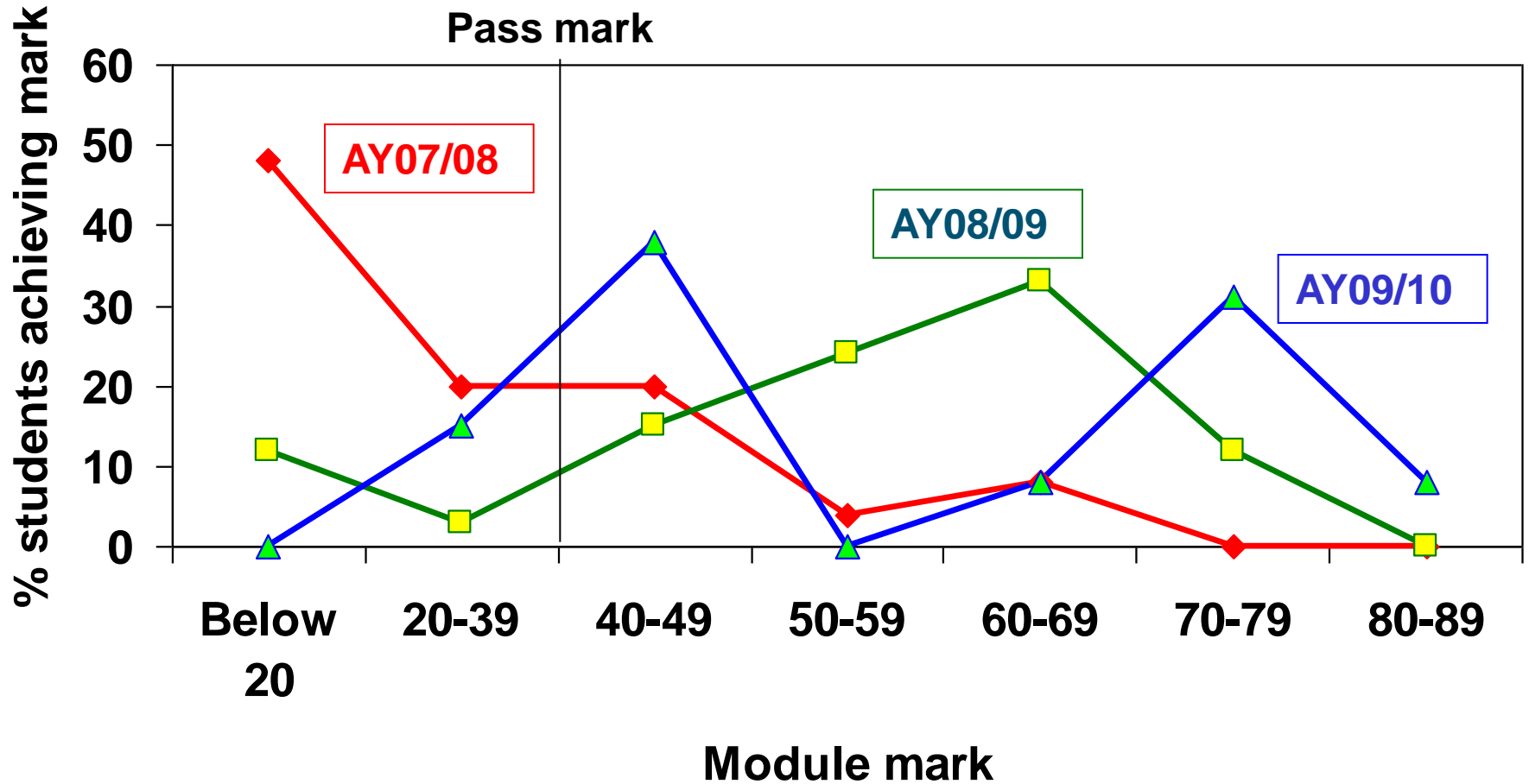
Student numbers: 46 + 51 + 36 (133 in total)

Student achievement: premeds only



Student numbers: 21 + 18 + 23 (62 in total)

Student achievement: science only



Student numbers: 25 + 33 + 13 (71 in total)

Proportion of students passing and achieving marks >60%

| | AY07/08 | AY08/09 | AY09/10 |
|--------------------------------------|----------------|----------------|----------------|
| % of all students passing | 61 | 90 | 95 |
| % of all students achieving >60% | 39 | 61 | 73 |
| % of science students passing | 32 | 85 | 85 |
| % of science students achieving >60% | 8 | 45 | 47 |

Conclusion and limitations

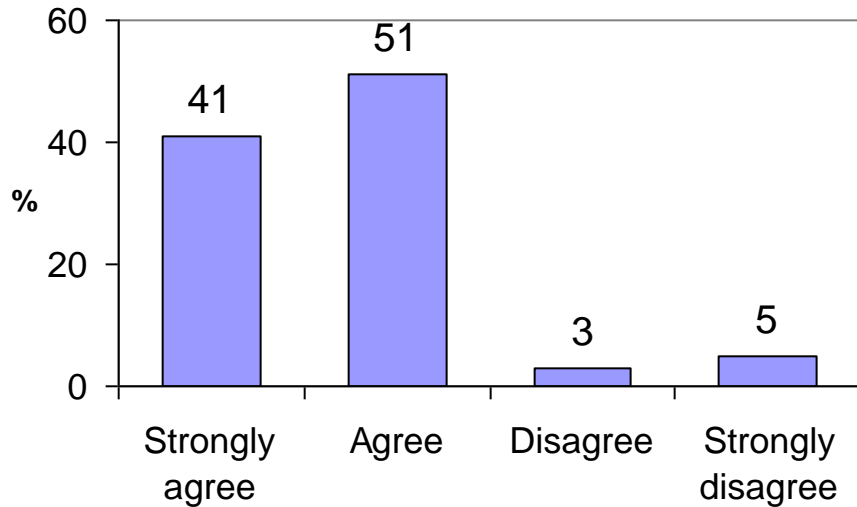
- Conclusion: clear upward trend in student achievement!
- Limitations:
 - We changed more than one variable
 - Relatively small student numbers (133 students in 3 AYs)
 - Comparing three cohorts
 - Longitudinal data for same cohort still to come...

Student evaluation - methodology

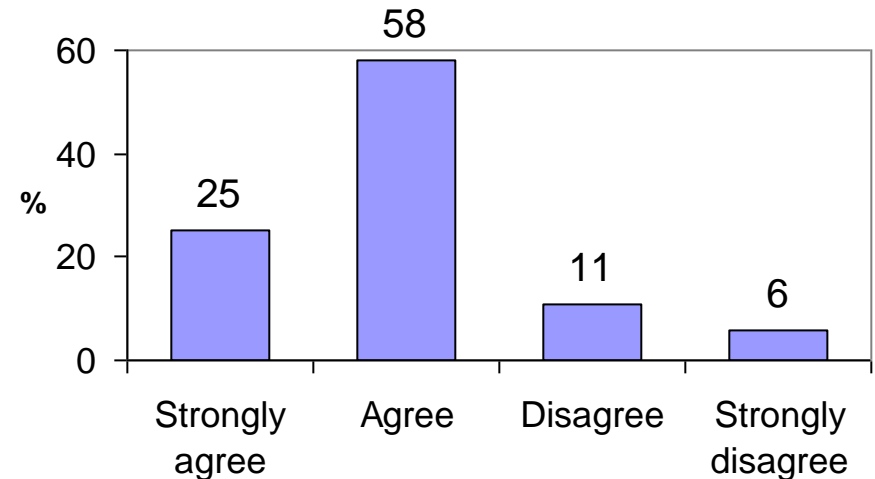
- Conducted AY 08/09
- The aim was to elicit student perceptions of the effectiveness of the RLOs in supporting their independent learning
 - Feedback on individual RLOs via an online feedback form
 - Effectiveness of the RLOs generally via a student questionnaire

Feedback from the questionnaire

I found the learning objects really useful

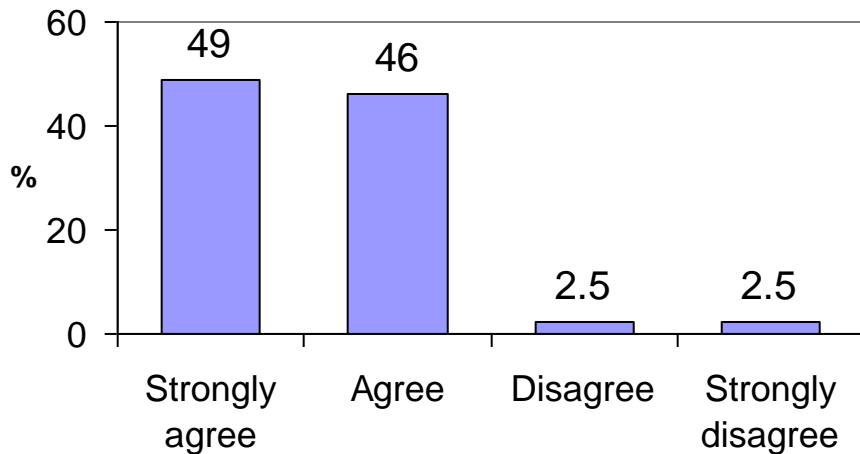


I would like more of these learning objects in other modules

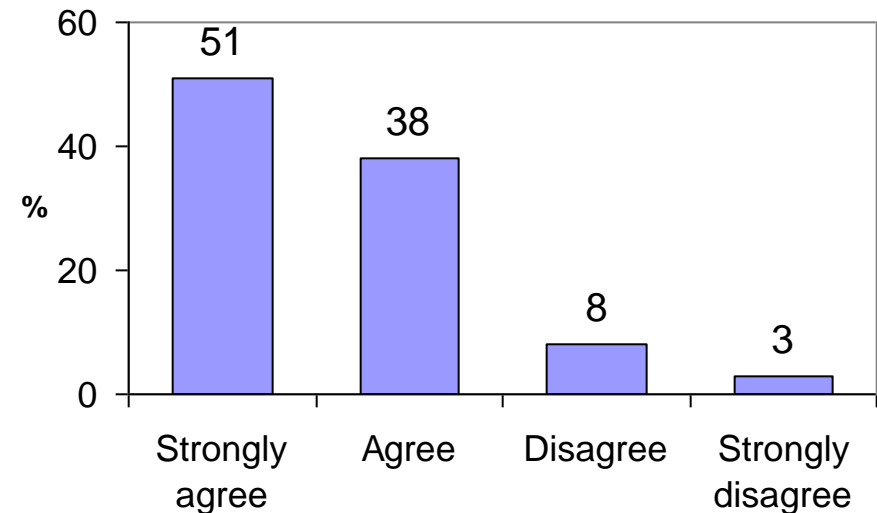


Feedback from the questionnaire

I liked being able to access the learning objects at any time, any where



I found the Blackboard site for the module really useful



What they liked about the RLOs

- “It is a detailed step by step guide that navigates you through the processes of academic referencing.”
- “It’s brief and easy to understand.”
- “It wasn’t just a load of writing: it had slide shows and videos which made it more interesting and pleasing to the eye.”
- “The learning object was really helpful in teaching me about reflective writing and advising me on how to do my own piece of reflective writing.”

How the learning objects helped with the module and supported independent learning

- 8 comments were made that the RLOs helped them to learn and understand the topics covered
 - 6 mentioned referencing, 2 writing essays
- Several students said that the RLOs helped them to develop specific skills and complete tasks, e.g.
 - “they showed how to do assignments”
 - “taught me to reference properly and reflect on my own skills”
 - “it gave me useful tips and ideas on how to structure my essay”
 - “it helped me how to write essays for other modules and how to undertake a research study”

How the learning objects helped with the module and supported independent learning

- 3 students said how the RLOs helped to support their independent learning:
 - “it supported my learning by guiding me on how to do my work”
 - they helped me “to find credible information on the Internet”
 - “it helped with independent learning and compels you to learn the computer”
- 1 said using the RLO gave them confidence
 - “it made me confident with referencing”

How the learning objects helped with the module and supported independent learning

- 3 said the RLOs helped their understanding:
 - “helped me to gain further understanding”
 - “sometimes I could not understanding something, I’d look at the computer exercise and it made it easy and clear to understand”
 - “They were user-friendly. Able to understand clearly.”
- Other comments:
 - “gives you lots of examples and lots of practice therefore”
 - “gave basic info to expand on”
 - “gives you an idea to know where to start”

Tangible benefits and measurable lasting benefits

- Improved progression (and retention)
- Quality learning objects for all our students to use over and over
- Embedding of GLO Maker Tool
- Production of customised Learning Objects