University of Bedfordshire

# Making Research Count via an Online Environment

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**ECE Conference - University of Salford**
**September 2009**

# Background

- 2005 - Public Health Masters offered as a full or part time taught course
- It became apparent that there were many more enquiries than applications received. Why?
- Audit of 88 enquirers = the attendance requirement problematic. The need for a distance learning mode of delivery identified
- 2007 – Online Public Health Masters launched – huge learning curve

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Diversity in Publ
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Useful Websites
All discussions
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PebblePad
PebblePad Help

# Exploring Research Methodologies

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# Identifying the Challenges

- A degree is the minimum entry requirement.
- The expectation was that the students would come with a basic understanding of the research process
- This proved not to be the case
- Our early perceptions – lack of academic skills
  - Referencing, quality of literature used, critical analysis skills particularly problematic

# Questions we asked ourselves …

- If the traditionally taught students were having difficulty with key skills what would we find with the distance learning students?
- How were we going to get the distance learning students to engage with research and develop key skills via an online environment?

# Finding the answers!

- Research and evaluation needed
- Ethics approval and funding (CETL) secured
- Study Design – Action Research

# Action Research (AR)

- This approach begins with an idea and the research process is the developmental process of:
  - following through the idea
  - seeing how it goes
  - continually checking whether it is in line with what we wish to happen

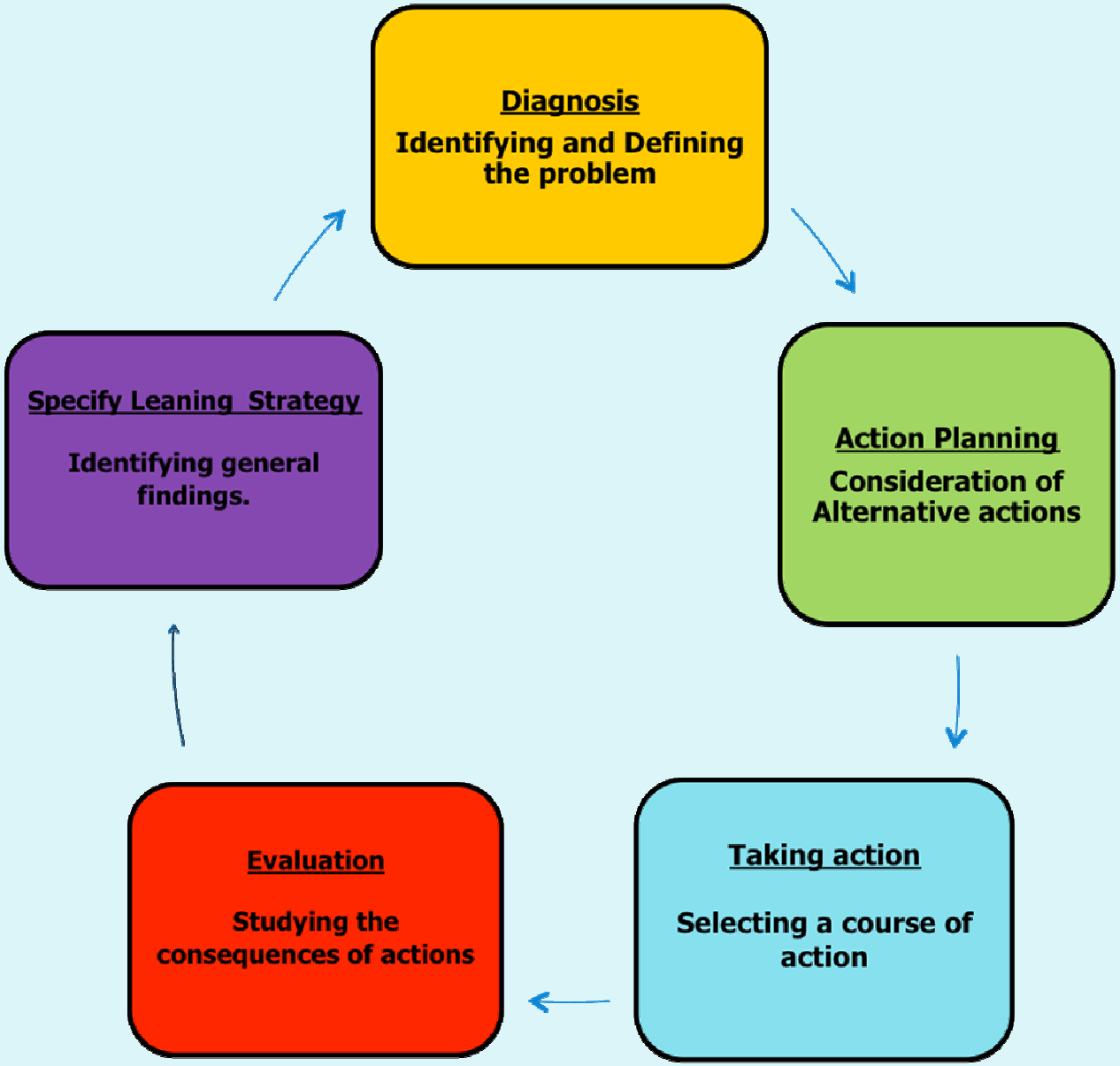
# Action Research (cont.)

- Seen in this way, AR is a practical way of looking at our own work to check that it is as we would like it to be

- AR is open ended and does not begin with a fixed hypothesis. Hence, is a form of self evaluation

*McNiff , J (2002) Action research for professional development – Concise advice for new action researchers [online]* www.jeanmcniff.com/booklet1.html

# Action Research Cycle



# Stage 1: Diagnosis - identifying and defining the problem

- Attending students have difficulty with developing research skills so what strategies can we use that will be equally effective for our online students?
- How do we ensure that **all** our students gain the research skills required for '*real world'* practice
- Brew & Prosser (2003) suggest that students and academics engage in a 'research' partnership, and work together in a community of learners. Is this possible with online learners?

Brew, A and Prosser, M T (2003) Integrating quality practices in research-led teaching and institutional priorities, *Proceedings of the Australian Universities Quality Forum: National Quality in a Global Context, pp.118-121 [online] http://www.auqa.edu.au/auqf/2003/program/day3.htm*

## Stage 2 :Action Planning - consideration of alternative actions

- Beetham & Sharpe (2007, p3.) ask *'are we prepared and ready to re-think our pedagogies and re-do our practices?'* They further propose that contemporary pedagogy would need to encompass '*ways of knowing'* as well as '*ways of doing'*
- Hughes (2008, p438) : *'technology, without the pedagogy can be a fetishised and empty learning, and teaching experience – stylized, but without substance, simply an electronic information push'*

# Stage 2 (cont.)

- Hughes further proposes that the UK has lost it way and that pedagogical debate has been held back by emphasising the technology *per se*.

Beetham, H., & Sharpe, R., (2007*) Rethinking pedagogy for a digital age, designing and delivering e-learning*, London; Routledge

Hughes, J. (2008) *Becoming an eportfolio teacher*. In Cambridge, D., Cambridge, B. & Yancey, K. (Eds.) Electronic Portfolios 2.0: Emergent Findings and Shared Questions. Washington, DC: Stylus Publishing.

# Stage 2 (cont)

- Mayes and de Freitas (2007, p23) suggest that we are witnessing '*a new model of education, rather than a new model of learning'* as *'our understanding deepens…we see how learning can be socially situated in a way never previously possible'*.

- We need to continually review our pedagogies and understanding of e-learning

Mayes & de Freitas (2007) in Beetham, H., & Sharpe, R., (2007*) Rethinking pedagogy for a digital age, designing and delivering e-learning*, London; Routledge

# Stage 3:Taking action – selecting a course of action

- Formally explore the academic achievement of our student cohorts
  - do our perceptions match student ability?
- Listening to the student voice
  - What do they think is working?
  - What do they think needs to be improved?

# Sample: n=104

- All students asked to complete and return a questionnaire (via email)
  - Data gathering tool has evolved over time
  - Very high response rate

# Data Collection: Questionnaire

## Background Data

- Mode of Delivery?
- Home / overseas student?
- Course Duration?
- Academic Level on Entry?

# Data Collection: Questionnaire (cont)

- Student perception of research skills on entering the course and again on completion
- Identify what skills they want to develop / what skills have been developed
- What teaching and learning strategies are effective / could we do anything differently?

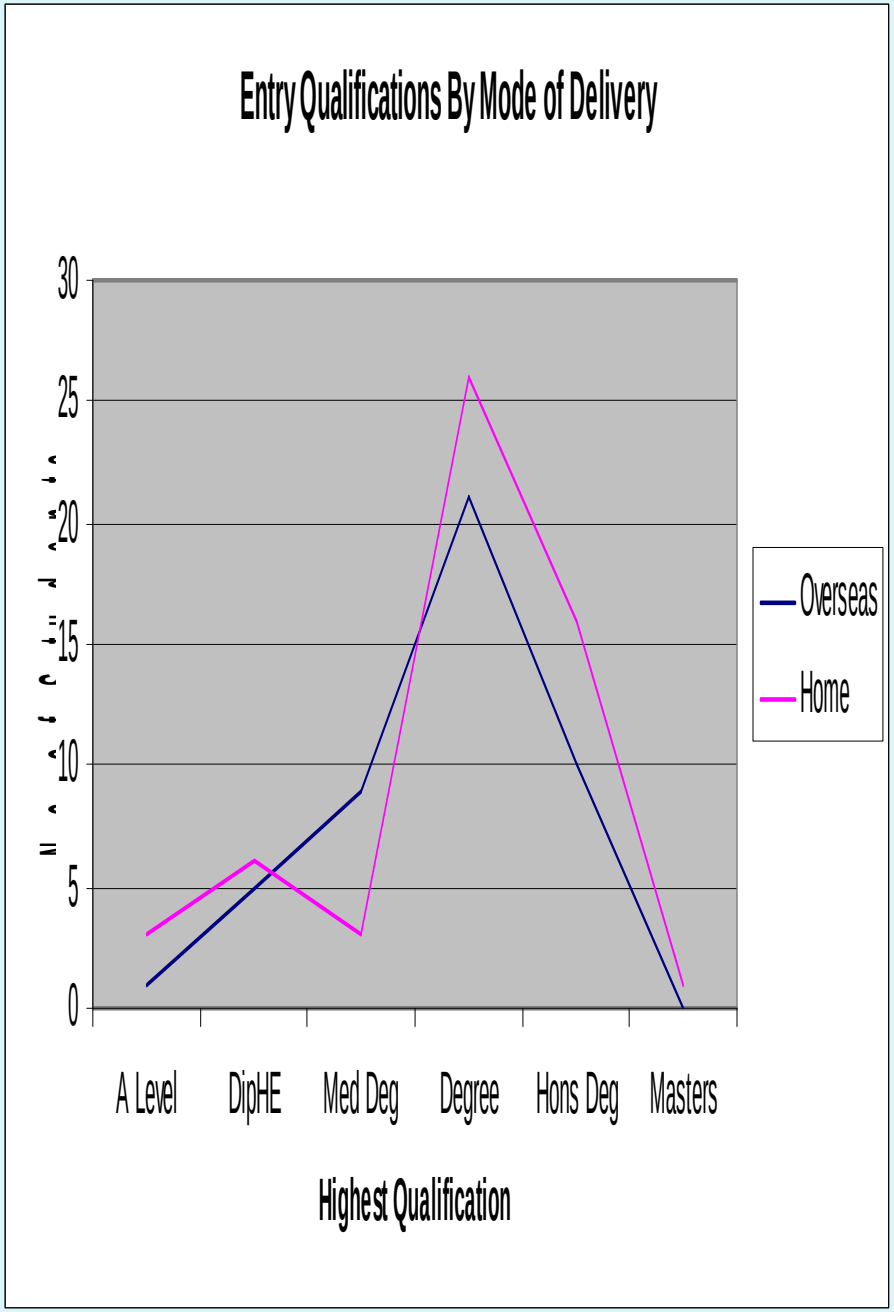
# Outcome Measures

**Academic achievement** (Assessment Grades)

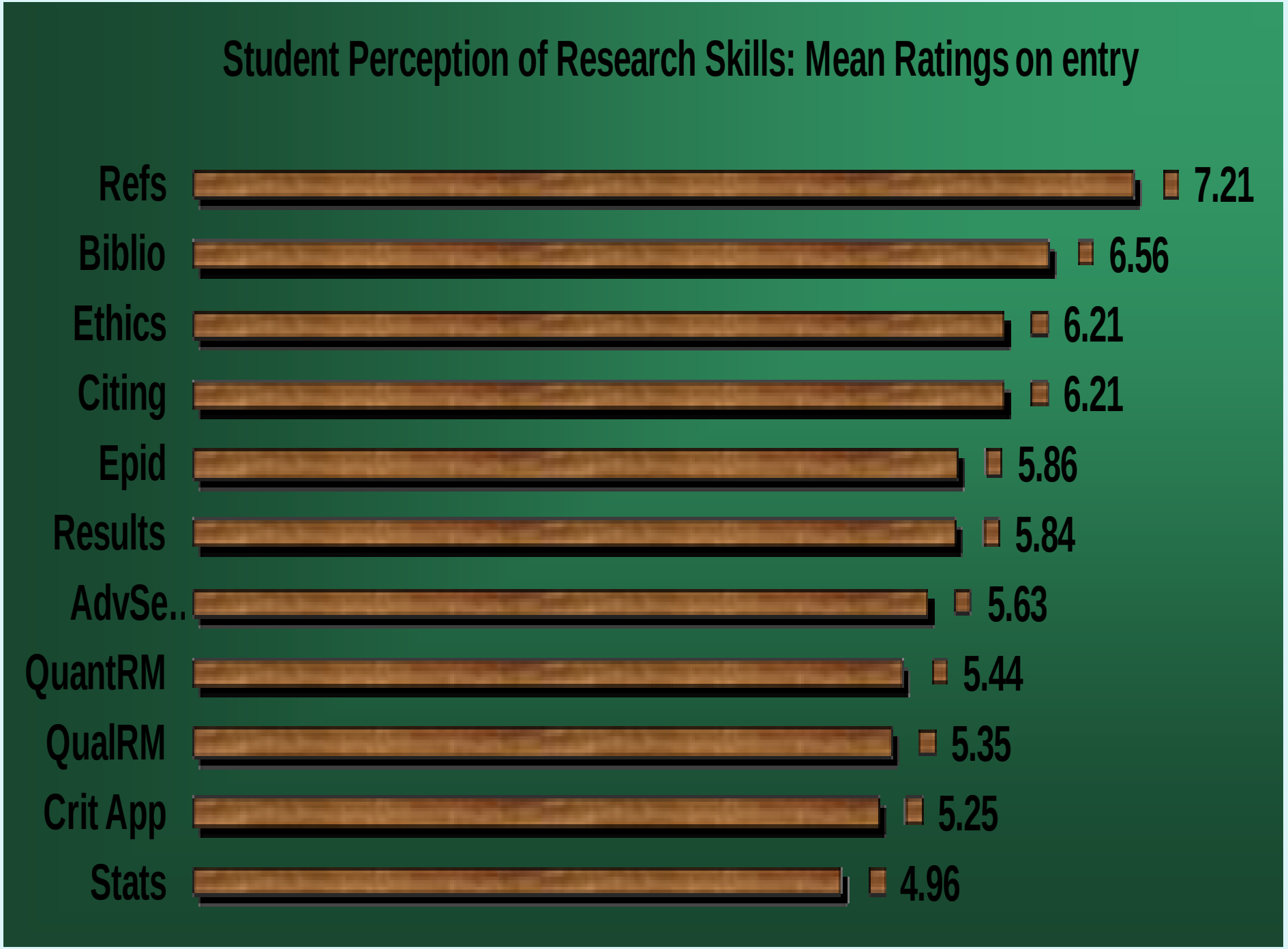
- Research Methodologies Unit (Early in course)
- Dissertation (Final assessment)

# Results (1)

- Mode of Delivery:
  - 74 traditional taught (71%)
  - 28 online
  - 2 mixed (some online learning due to pregnancy)
- Course Duration:
  - 74 completed full time (1 year)
  - 29 part time (2 years)
- International Students:
  - 46 International students (44%)
  - 3 EU students (2%)




- There was no significant difference in entry qualifications by overseas or home student status (n=101)
- Differences in perceptions of research skills also not significant (n=54)
  - referencing most confidence with (mean 7.21)
  - Statistics least confidence with (mean 4.96)


Student Perception of Research Skills: Mean Ratings on entry
Refs
7.21
Biblio
6.56
Ethics
6.21
Citing
6.21
Epid
5.86
Results
5.84
AdvSe..
5.63
QuantRM
5.44
QualRM
5.35
Crit App
5.25
Stats
4.96

# Results (2)

Suggested Changes to Research Methods Content: (n=57)

9 stated no changes needed

20 identified the need for more sessions / time

10 want more coverage of statistical analysis

Skills TO develop: (n=104)

Just under half wanted to develop all skills

Interpreting data was identified by 22%

Skills NOT developed: (n=47)

100% stated that they had not sufficiently developed data analysis skills

# Key findings

- There is no difference in outcomes (grades) by mode of learning
- There is the need incorporate more statistical analysis and interpretation of data into our teaching
- Level of education does not seem to have impacted on grades. Those with A Levels or Dip HE (n=8) did as well as those educated to degree level
- Interestingly of the 7 who failed their dissertation on first attempt 4 have an honours degree, 2 a medical degree and one an unclassified degree. None had lower entry qualifications. Evenly spread across overseas (4)/ home students (3).

# Changes to date as a result of study

- We have introduced more 'workshop' teaching sessions where students can work in small groups to access, interpret and discuss real world research. Online activities to be developed for distance learners
- We have incorporated more online activities to facilitate engagement – these include online discussion forums, Wiki's plus games such as hangman & crossword puzzles

# Changes to date as a result of study(2)

- More videos and podcasts incorporated as these have been well evaluated.
- Voice emails have been well received by the online students – especially useful for providing feedback
- Skype well evaluated as this provided 'human' contact with online students

# The future

- To continue to gain to student feedback and develop online material in line with this (Evaluation: studying consequences of actions)
- To continue to evaluate and develop our online material
- To provide a range of material that will engage all students
- To work towards a 'community of learners' so students can support each other regardless of mode of learning

# Recommendations

- To develop strategies that will facilitate online, student focussed learning communities (**Specify Leaning - Strategy Identifying general finds**)
- To facilitate the integration our Masters students into the wider research culture within the University (RiT)
- Revisit Action Learning Cycle

# And finally ….

…… thank you for listening

We would appreciate you sharing your thoughts and experiences.

Questions also welcome!