



CETL-AURS

Research Skills Auditing

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Format

- Introductions to CETL and AURS
- Research Skills Audit Tool
- Case study
- Conclusions



Introduction

- 2005: HEFCE awarded 74 Centres for Excellence in Teaching and Learning
- Total cost of £315 million over 5 years
- CETLs at Reading:
 - **Applied Undergraduate Research Skills (AURS)**
 - Centre for Career Management Skills (CCMS)
 - Learn Higher (collaborative)
 - Innovative Physics Teaching (collaborative)



CETL-AURS

- Key disciplines Agriculture, Zoology, Archaeology, Typography, MERL
- Discipline-specific initiatives – i.e Industrial placements, Engage website
- Inter-disciplinary projects
i.e. Skills mapping, Undergraduate Research Opportunities Programme (UROP), Undergraduate Journal,



Rationale

- Transferable skills mapping conducted previously
- Confident skills are firmly embedded
- Need to regularly identify and reflect what, where and how research skills are taught and assessed across programmes
- The need for a rapid and logical method for doing this

'Skills Mapping'

- **What is a skill?**
 - Original focus was 'research skills': but broadened to think about skills!
 - Expertise in something, practised ability
- **Divided skills into either:**
 - Transferable skills
 - Discipline-specific (e.g. microscopy, Profit and Loss analysis, surveying etc.)
 - Out of these a number of 'research skills' can be identified

Example skills

Transferable	Discipline-specific
Written communication	Invertebrate identification
Oral communication	Disease identification
IT	Crop evaluation
Self Management	Vehicle inspection
Problem solving	Injury diagnosis
Numeracy	Profit and Loss analysis
Learning	Balance Sheet analysis
Interpersonal	Weed identification



Skills Audit Tool

- Automated methodology to map skills teaching and assessment in programmes
 - Curriculum design; Flexible programmes
- Module co-ordinators & programme directors
 - Reflect on skills within and across modules
 - Better articulate skills learning opportunities to students
 - Framework for discussion with employers



The automated skills audit tool

- Form-based software developed by UWE
- CETL-AURS designed forms to map skills
- Module co-ordinators enter data
- Programme directors: automatic access
- Individual module and programme review
- Reports are automatically generated by programme director ('administrator'): PROFILE links to Excel



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Winner
e-Tool of the Year 2006



1. Skills

Transferable Skills

Which transferable skills are explicitly taught and/or further developed through course work in this module?

Written communication	✓ Taught	▼	Problem solving	✓ Select	▼
Oral communication	✓ Developed	▼	Numeracy	✓ Select	▼
Information technology	✓ Both	▼	Learning	✓ Select	▼
Self-management	✓ Select	▼	Interpersonal	✓ Select	▼

If transferable skills are explicitly taught, what teaching methods do you use?

Written communication

✓ Select	▼	✓ Select	▼
✓ Select	▼	✓ Select	▼
Lectures			
Small Group Teaching			
Laboratory, practical			
Field Classes			
Discussion or debate			
Group Work			
Seminars			
Tutorials			

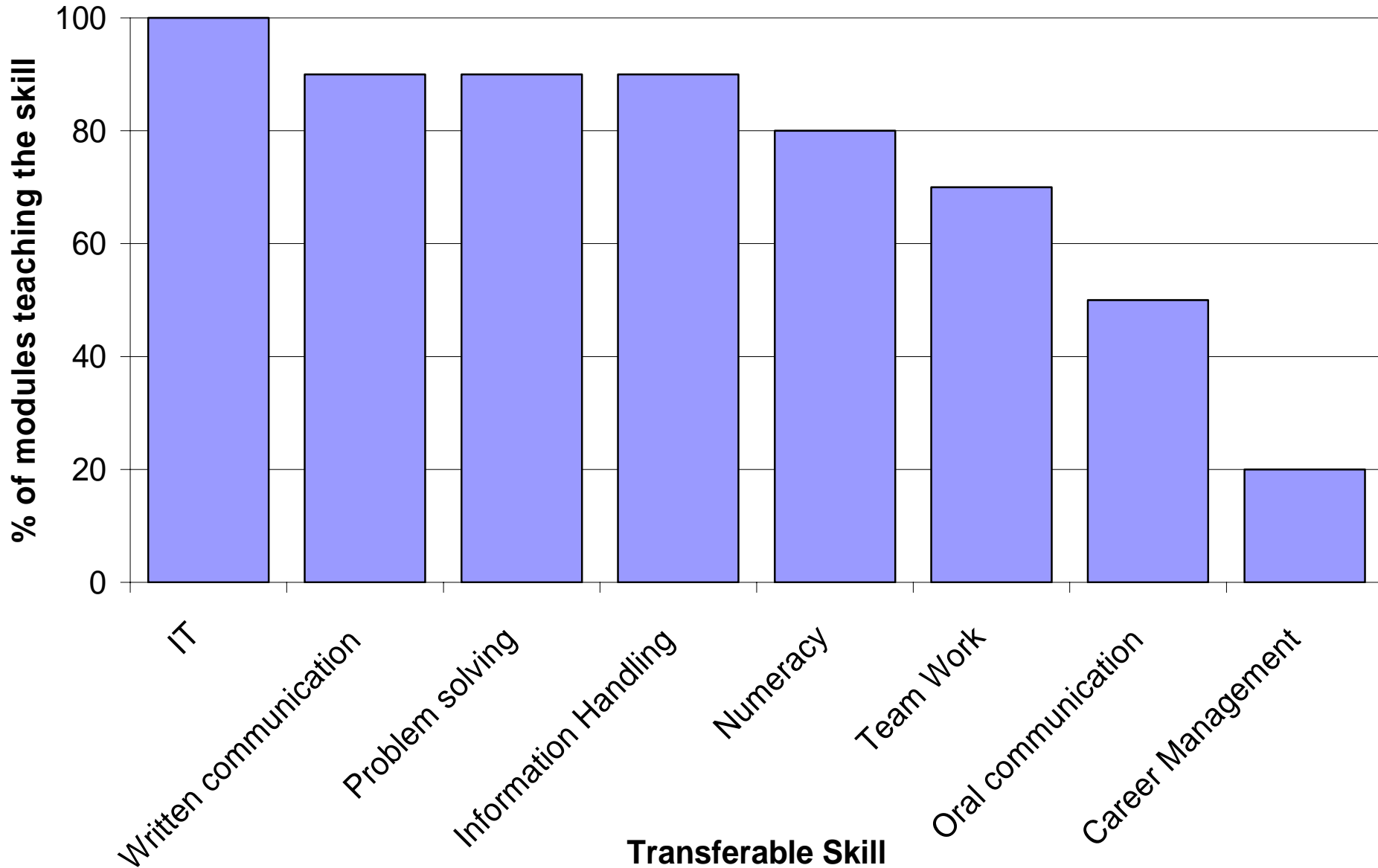
Module Code	Module Name	Written comm	IT	Numeracy	Oral comm	Discipline-specific skills
AP1SB1	Business Management	Taught	-	-	Taught	Analyses of company performance
AP2A31	Farm Business Administration	Taught	Taught	Both	Both	Financial management
AP2EQ1	Research Methods and Data Analysis	Both	Taught	Both	-	Multivariate statistics
AP3A56	Business Planning Methods	Develop	Taught	Develop	-	Application of business planning techniques



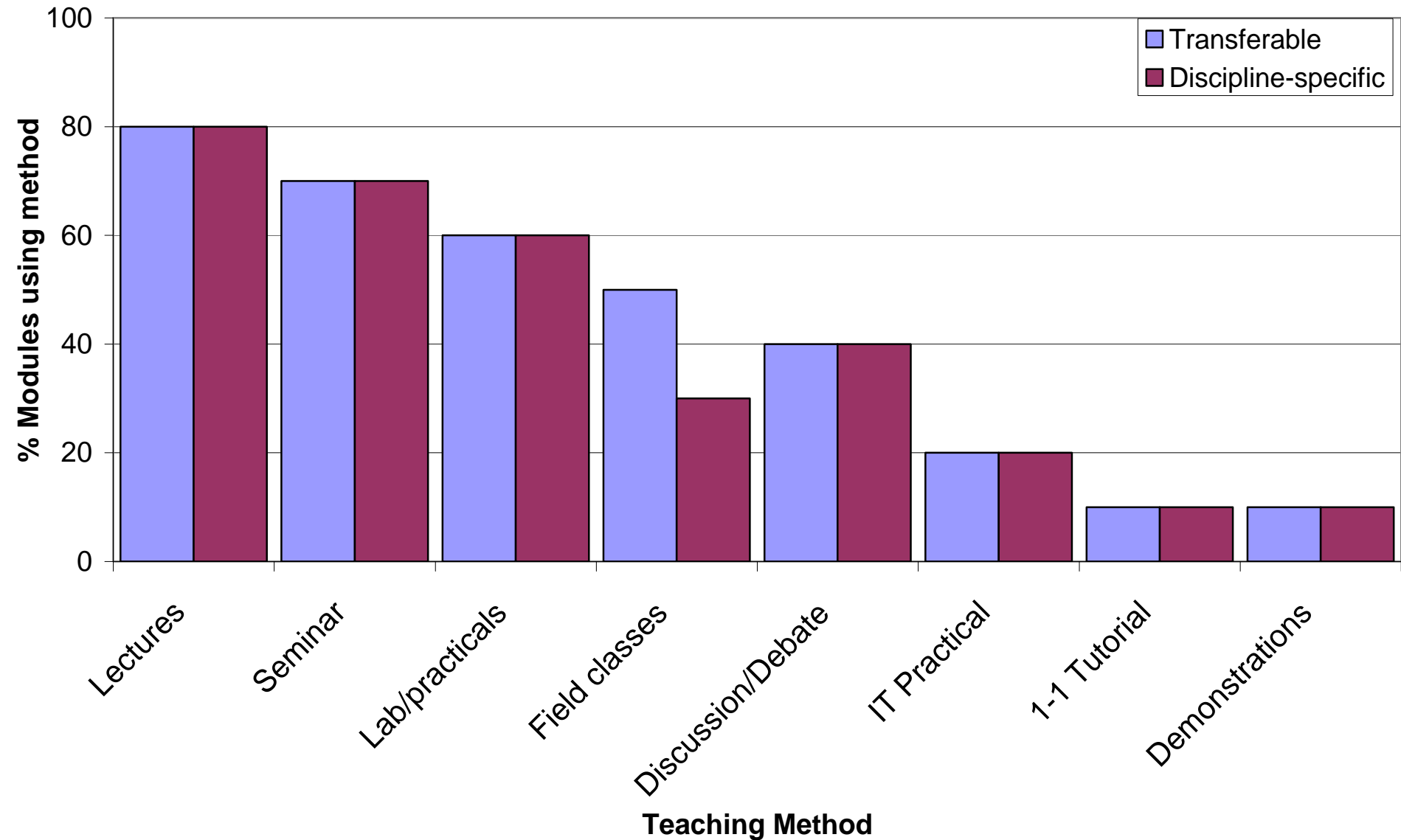
BSc Rural Environmental Sciences

- Conducted on core modules
 - 5 Part 1 (60 credits)
 - 5 Part 2 (60 credits)
 - 4 Part 3 (60 credits)
- 10 different module convenors
- Spanning 3 Schools

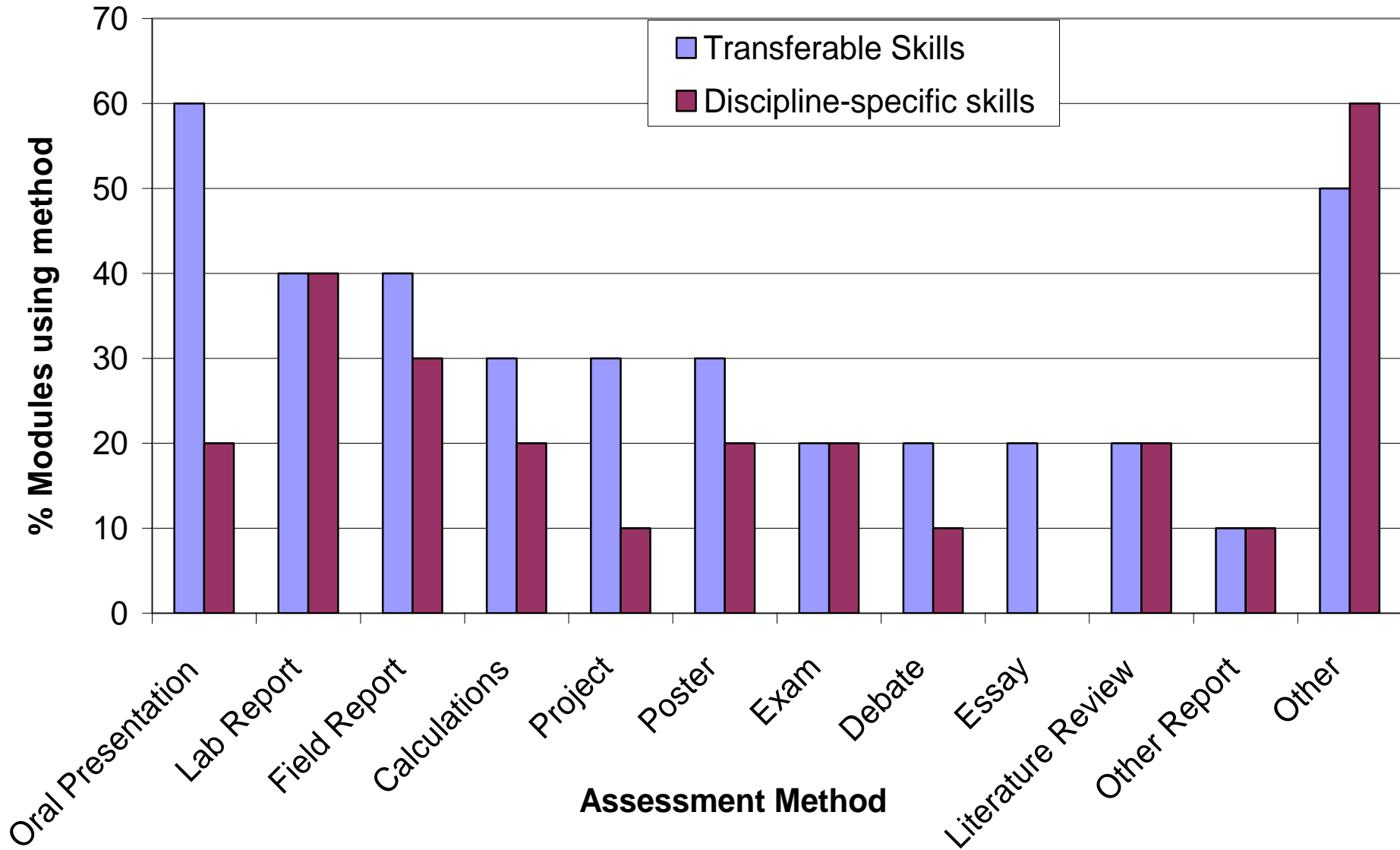
Transferable Skills Teaching



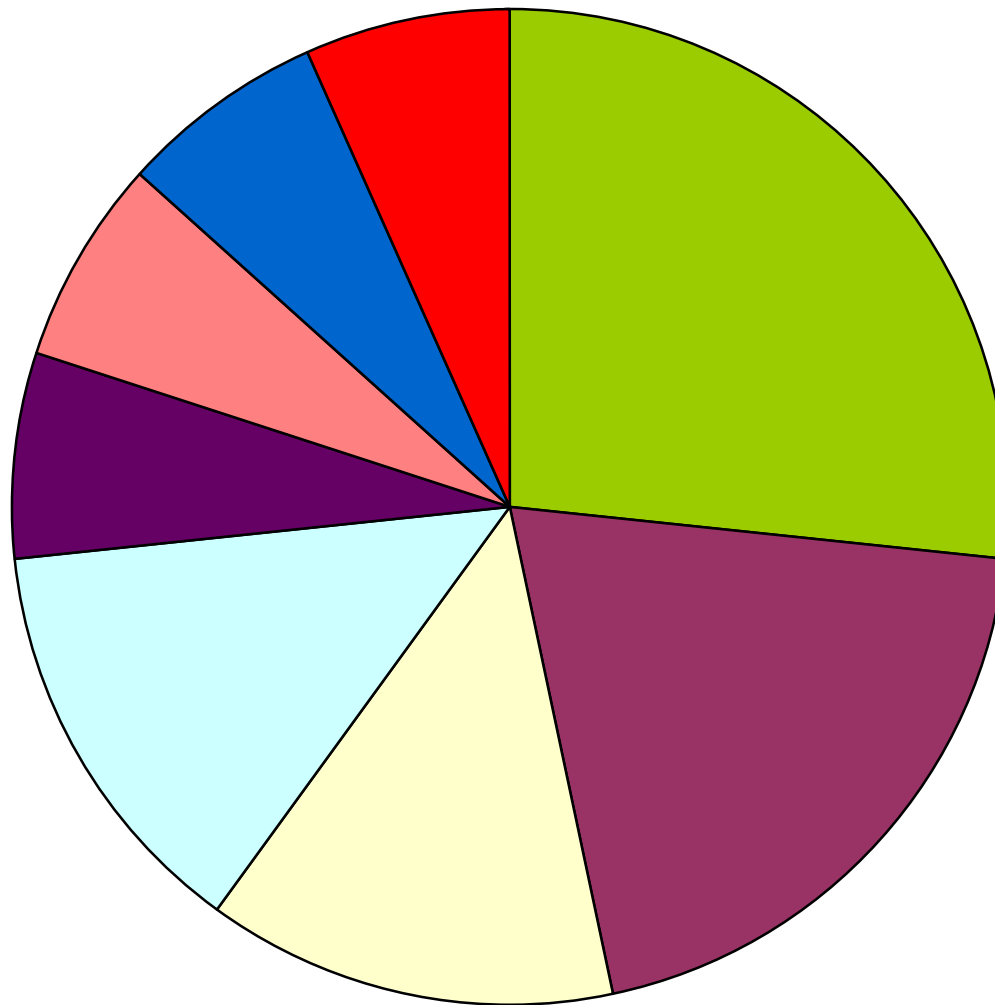
Teaching Methods



Methods of Assessment



Assessing Written Communication



- Exam
- Other Report
- Essay
- Project
- Class test
- Poster Presentation
- Literature review
- Laboratory Report



Examples of Specialist Skills

- Taxonomy
- Ecological sampling
- Surveying
- Landscape evaluation
- Simulation modeling
- Statistics and data analysis
- Soil identification

etc.



Links to Employability

- Audit tool provides comprehensive list of skills learning opportunities
- Illustrates areas that need enhancing
- Can cross-reference skills with employer expectations
- Timely given release of HEA's Student Skills Profile



Evaluation

- Developed evaluation pro forma
- Very positive responses from academics
- Some changes to modules as a result
 - Module Description Forms
 - Assessment review
- Interest from Schools across the University



Concluding comments

- Rapid front line tool
- Can be used to provide regular evaluation
- Useful in terms of reflection

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<http://www.bioscience.heacademy.ac.uk/journal/vol9/beej-9-1.htm>