The Science Learning and Teaching Conference 2007

Welcome and Introduction

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The Higher Education Academy Centre

SLTC 2005

- Final session
- Issues facing L&T in science in 2005.
- Revisit at SLTC 2007

Student skills

- Maths more resources, eg CETLs
 - PSC Maths for chemistry SIG, plans to widen to all STEM
 - MathTutor resource being developed to have subject context eg bioscience
 - SIGMA CETL support for students on programmes with maths
- English language skills
 - Write Now CETL development of innovative, evidencebased provision focused on writing for assessment
 - Bioscience SC development project

- Student skills on entry vs skills on exit
 - Reviews of the Student Learning Experience in Materials, Microbiology, Biochemistry, Chemistry, Physics and Astronomy
- PDPs
 - ICS, PSC publications
 - Materials Developing professional skills guide for lecturers
 - PSC e-portfolio development, online Employability module

Staff skills

• CPD for teaching staff vs research staff

- The Centre for Excellence in Preparing for Academic Practice CETL supporting postgrads and postdocs who wish to develop academic careers.
- STEM SC workshops for postgrad demonstrators
- PG Certs for new staff would carry more weight if targeted at senior staff first
 - SC workshops and resource packs for new staff
- Teaching related CPD (ethics, etc) vs discipline specific CPD
 - IDEA CETL working with HEA SCs to develop tailored resources

- Provide info on plagiarism to staff
 - JISC plagiarism advisory service (<u>http://www.jiscpas.ac.uk/index.php</u>) examples of good practice
 - ICS SC links to plagiarism tools and ongoing review
 - SC publications
- Provide info on A level content to staff
 - 16-19 science curriculum meeting
- SEDA is under used
- Addressing the 'no time' culture

Retention and transition

- Avoiding drop out
 - STAR (Student Transition and Retention) project: Guide, booklets and audit tool.

http://www.ulster.ac.uk/star/index.htm

- mathcentre provides wealth of resources to ease transition <u>http://www.mathcentre.ac.uk</u>
- Buddying, mentoring etc

Retention and transition 2

- Earlier career advice to keep students focussed
 - PSC student employability skills handouts for physics, forensic science and chemistry
 - Materials 'Why study materials?' website
 - Professional bodies-hefce projects for 'strategically important and vulnerable subjects'
- Effective PDP introduction
 - Bridges: Supporting Personal Career and Professional Development Through the Undergraduate Curriculum CETL
 - PSC e-portfolio and online Employability module

Retention and transition 3

- Induction week crucial
 - Engineering report on University Southampton, School of Engineering Sciences Induction week
 - Bristol ChemLabs CETL summer booster week for students before commencing HE for those without maths/physics
- Variety in T&L methods
 - HEA SC events, publications, projects
 - CETLs
- Early diagnosis of 'at risk' students

Assessment and feedback

- Expert workshops with disseminatable outputs
 - SCs and CETLs
 - ASKe CETL Assessment Standards Knowledge Exchange
 - FDTL FAST videos
- Formative feedback/feedforward
 - NSS, FDTL FAST
 - PSC Development Projects, questionbank with feedback
 - Bioscience SC Effective feedback to students workshop

Assessment and feedback 2

- Peer assessment
 - SC publications
 - SC projects
- Evidence based assessment
- Evaluation of teaching
 - SC publications

The system

- Abolish modules
- Abolish RAE
- Academy to champion teaching
 - Professional standards, accredited programmes, NTFS, CETLs, CPD, funding
- Expand non-traditional routes to HE
 - Expansion in FdSc, employer engagement, recruitment, HEFCE projects, 14-19 Diplomas
- Use Deans of Science group
 - Being investigated

Good news

- Increased awareness of good practice
- Good resources available
- Use workshops and publications to take forward
- Strong group emerging from SLTC

2007

- Increased levels of activity and engagement
- Rising profile of teaching and learning?
- Increased funding for science teaching

Looking forward

- Post-RAE
- FEC for teaching
- Variable top up fees

Have a good conference!