

Enhancing Engineering Education

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Overview

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- National Context
- Examples of LTSN activity
- What next ?

What is the LTSN?

- The **L**earning and **T**eaching **S**upport **N**etwork
- Established January 2000
- 24 subject centres + Generic Centre
- ~£8M/annum over an initial 5 year period
 - Networking
 - Promotion and sharing of good practices L&T
 - Knowledge brokerage

Government Policy

(HEFCE 24/02)



‘We want to have a clear strategic alliance between our strategies for learning and teaching, widening participation, and disability, within a framework that has the key objective of maintaining and improving quality and standards in learning and teaching.’

National Priority Areas

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- widening participation (50% by 2010 ??)
- ensuring fair access to higher education
- maintaining and improving retention rates
- enhancing the employability of graduates and diplomates
- encouraging and disseminating good and innovative practice in support of high quality learning and teaching

Supply & Demand

(HEFCE 01/62)

- No increase in numbers of 16 year-olds in education since 1994
- No significant increase expected in applicants to HE with A-level or equivalent qualifications
- Growth must come from under represented groups

Students with Disabilities

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- SENDA legislation now in effect
- Need to have taken all reasonable steps to make learning accessible
- Learning & Teaching offered to students with special needs should not be 'ghettoised'

Progress files

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- Transcripts 2002-03
- Students must have access to Personal Development Planning (PDP) by 2005

QAA Audit

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- Need to have defined learning outcomes
- Need to demonstrate attainment of learning outcomes
- Need to demonstrate appropriate standards

University L&T Strategies

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- 1999 TQEF Funding required University L&T strategies
- 2002 TQEF requires universities to update L&T strategies
 - Who writes them?
 - What impact do they have on departments?
 - What impact do they have on student experience?

Recruitment

	1993	1999	% ch.	2001	% ch
General Engineering	3462	1928	-44	1955	-44
Civil	3157	1682	-47	1625	-49
Mechanical	3829	3297	-14	2985	-22
Aeronautical	896	1140	27	1327	48
Electrical/Electronic	4507	2517	-44	2629	-42
Production/Man	1314	1155	-12	1372	4
Chemical	1156	843	-27	660	-43
Source Engineering Council/UCAS					

Student Diversity

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- Changes in school curriculum
- Maths Skills
- Falling applications mean we recruit from a more diverse pool
- Implications of SENDA

LTSN Contribution

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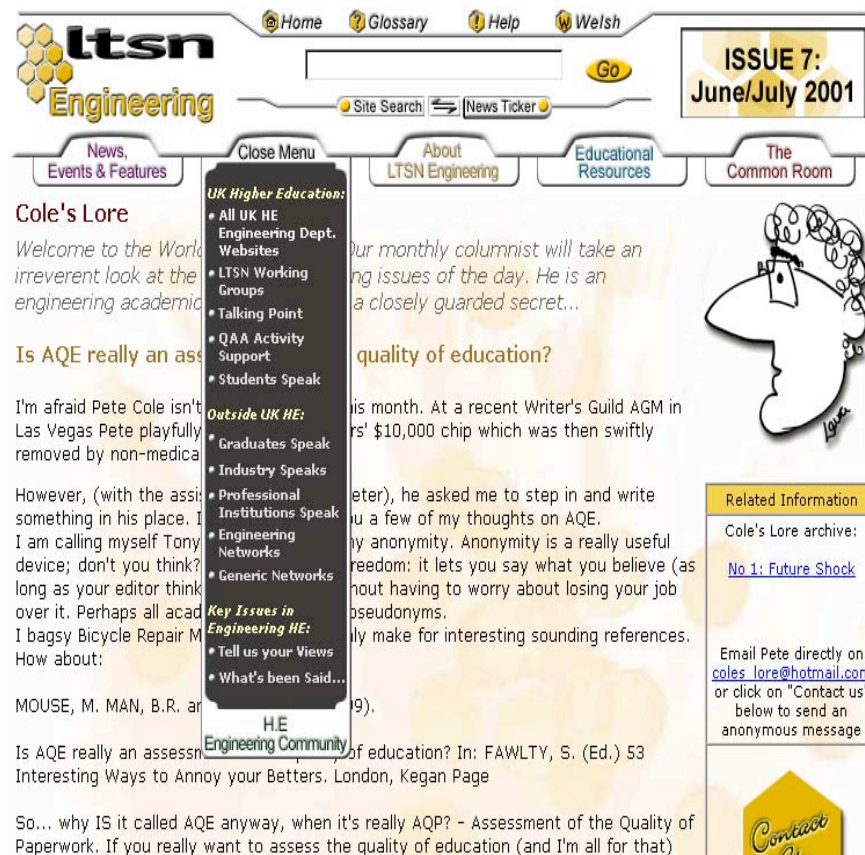
- Brokerage
- Identify needs and provide resources/events to help meet them

Establish Network

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- Engineering HE Community
 - ~250 Departments at 100 HE Institutions
- LTSN Engineering Departmental Contacts
 - 68% Departments at 85% HE Institutions
- Regional Departmental Contact Networks
 - Currently being established?
- Mailing lists
 - 1200 on mailing list
 - 500 on engineering JISCmail list

Web



- Key communications medium
- News & Events
- Resources
- 60-100,000 hits per month

www.ltsneng.ac.uk

Resources

- Guides

www.ltsneng.ac.uk/er/resources/

- Benchmark papers
- Disabilities report
- FE Scoping Study
- Assessment of Individuals in Teams
- LTSN MathsTEAM Project
 - Diagnostic Testing, Student Support, Teaching Maths in Context

L&T materials

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- SearchLT Engineering

www.searchlt.engineering.ac.uk

- Searchable database of online teaching materials

Events

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- Regional Events (8 per year)
 - Student Motivation and Retention - Strathclyde
 - Maths Support - Swansea
- Workshops
 - Strategies for QA&E

Collaborative activities

- EPC Assessment of Output Standards Workshop



- Survey of engineering academics views on SARTOR for EC(UK)
- Workshop on Distance Learning with the Open University

Commissioned work

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- Funding Opportunities – call in January 2003
 - Mini Projects
 - Special Interest Groups
- Case Studies
 - Key Skills in Engineering
- Reviews
 - Book reviews
 - Software reviews

The Future

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How Important is effective LT&A to universities?

- Increased student fees?
- Widening participation?
- Retention?
- SARTOR4?
- PDP
- SENDA
- Research v Teaching?

Get Involved!

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- Register
- Contribute expertise and experience
- Support events
- Use the centre
- Advise on needs and gaps
- Encourage others to do the same