Towards student success: Principles and practicalities

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30 October 2009
The Policy context

HEA Strategic Plan, 2008-2010

• Increased participation and improved access
  Participation up from 55% to 72% by 2020

• Greater flexibility in course provision to meet diverse student needs in a context of lifelong learning
  Modular programmes
  Upskilling of the population implies more part-time provision

• Emphasis on the quality of teaching and learning

  The interaction between these is complex, and has implications for student success and retention
Matters arising

• Tension between policy aims

• Curriculum design and implementation
  Learning development and curricular flexibility
  Relationship between full-time and part-time study

• Teaching and learning
  ‘Employability’ and entrepreneurship prominent

• Accountability, and performance indicators
  Variation between universities (e.g. Morgan et al, 2001)

• Retention as a second-order issue
Five principles

1. Rationale
2. Appropriate curriculum design
3. Teaching for engagement
   • Early academic engagement
   • Active learning
   • Establishment of standards
4. Formative assessment
5. Social integration (student/student; staff/student)

First, my ‘take’ on rationale
Then the other four, but treated more integratively as ‘Curriculum design and implementation’
Rationale – a personal view
You may have a different one
What’s the problem?

Retention

Student success

So what is student success?
Student success

Student success for a complex world requires a rich blend of

• personal attributes,
• knowledge and understanding, and
• skilfulness in drawing on them (situation-relevant application)

In other words, emerging professional capability

which implies the development of personal autonomy
Capability

Capable people have confidence in their ability to
• take effective and appropriate action
• explain what they are seeking to achieve
• live and work effectively with others
• continue to learn from their experience...

Capable people not only know about their specialisms, they also have the confidence to apply their knowledge and skills within varied and changing situations and to continue to develop their specialist knowledge and skill...

*After Stephenson & Weil (1992)*
The point about Capability is that it didn’t set academic learning in opposition to ‘skills’: rather, it treated them as complementary.

To a first approximation:

Good learning → Student success
Progression
Completion
Employability

Hence the curriculum needs to grapple with the issue of what constitutes ‘good learning’
Employability: ESECT’s definition

A set of achievements, understandings and personal attributes that make individuals more likely to gain employment and be successful in their chosen occupations.

Notes

1. **NOT** to be confused with actual employment rates

2. The plural ‘occupations’ signals the possibility of ‘portfolio careers’, changes of direction, etc.
The USEM account

Developed in the context of employability, but relevant to capability and to learning in general

U nderstanding

S kilful practices (subject-specific and ‘generic’)

E fficacy beliefs (and self-theories generally)

M etacognition (including reflection)
Curricular emphases

Understanding [U] and Skilful practices [S] are broadly acknowledged to be important in higher education

Probably less so are
- Skilful practices in work-related settings [S]
- Efficacy beliefs etc (‘the personal’) [E]
- Metacognition [M]

In the first year, E and M are arguably the aspects that should be moved to a more prominent position
Employability; broader personal effectiveness

Skilful practices in context

Subject understanding

Meta-cognition

Personal qualities, including self-theories and efficacy beliefs

Employability; broader personal effectiveness
USEM

Is supported by both theory and empirical evidence
• Hence there is an academic justification for it

Correlates with ‘good learning’
• Much that goes on in HE is tacitly consistent with USEM
• One task is to make the tacit more overt
• There already exists a substantial base on which to build

Is permissive rather than prescriptive, i.e. is flexible
• It can accommodate disciplinary differences
• It can accommodate differing kinds of student

Is not a knee-jerk response to ‘employer demand’
The ‘personal’ (E)

Motivation … Pintrich & Schunk (2002)


Locus of control … Rotter (1966)

Self-efficacy … Bandura (1997)

Self-regulation … Zimmerman (2000) (also Metacognition)

Learned optimism … Seligman (1998)

Practical intelligence … Sternberg (1997)

Emotional intelligence … Salovey & Mayer (1990); Goleman (1996)
Metacognition (M)

• Possession of general strategies for thinking, learning, and problem-solving

• Capacity to differentiate between tasks, recognising that variation in difficulty is likely to require different cognitive strategies

• Awareness of how one tackles tasks and learns

• Self-regulation

There’s a connection here with personal autonomy (to be touched on later)
Curriculum design and implementation
Three big challenges

1 Transition into higher education
   - Disadvantaged students
   - Commuter students

2 What kind of curriculum?

and, within the general ambit of curriculum,

3 What kind(s) of assessment?
Transition

Is challenging, especially for 17 year-olds

- Early academic work
- Early formative feedback (standards, plagiarism etc)
What’s the game?

<table>
<thead>
<tr>
<th>Frank:</th>
<th>In response to the question, ‘Suggest how you would resolve the staging difficulties inherent in Ibsen’s <em>Peer Gynt</em>, you have written . . . ‘Do it on the radio’ . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rita:</td>
<td>Precisely.</td>
</tr>
<tr>
<td>Frank:</td>
<td>Well?</td>
</tr>
<tr>
<td>Rita:</td>
<td>Well what?</td>
</tr>
</tbody>
</table>

*Willy Russell: Educating Rita, Act 1 Scene 4.*
Transition

Is challenging, especially for 17 year-olds

• Early academic work
• Early formative feedback (standards, plagiarism etc)
• Engaging activities (for a wide spectrum of students) …
• … that have an appropriate academic purpose (which is signalled)
• Peer and self-assessment?
• **Time** for good learning to take place
Curriculum for the first year

1 Address needs of students. In the first year these are arguably more about learning to learn in higher education than anything else (as far as the cognitive is concerned)

2 Acknowledge students as individuals

3 Learning through as well as about the subject

4 Teaching for engagement. Not a simple continuation of school-based study: HE is different
Boredom

2003 YFCY findings … suggest that many remain disengaged from their coursework. Over 40% of the sample reported “frequently” feeling bored in class …

Keup & Stolzenberg (2004, p.15, emphasis in the original)

Proportion of lectures seen as boring

<table>
<thead>
<tr>
<th>None</th>
<th>2% of respondents (N=211)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some</td>
<td>39%</td>
</tr>
<tr>
<td>Half</td>
<td>29%</td>
</tr>
<tr>
<td>Most</td>
<td>27%</td>
</tr>
<tr>
<td>All</td>
<td>3%</td>
</tr>
</tbody>
</table>

Mann & Robinson (2009, p.250)
Teaching methods, ranked by boredom

1. Laboratory work
2. Computer sessions
3. On-line lecture notes
4. Copying overheads in lectures
5. PowerPoint without handout
6. Workshops
7. Video presentations
8. Group work outside lectures
9. PowerPoint with handout
10. Seminars
11. Practical sessions
12. Group discussions in lectures

*Mann & Robinson (2009, p.250)*

*Interpret with care!*
Data from c.6900 1st yr FT students

Have not done background reading

Have done more than the specified reading

Not as motivated as I should be
Motivation and engagement

Motivation level
- High
- Moderate
- Low

Engagement level
- High
- Moderate
- Low

Teaching approach

Motivation and engagement diagram.
Encouraging motivation

thx heaps 4 ur motivation email ☺☺ Chih (Week 11 Sem 1, 2003)

I just would like to say thank you for all those emails that you have been sending to us during the semester. They are very motivational, encouraging, funny and interesting. Being a mature age student and from a non-English speaking background I have experienced some moments when I thought that it was too hard and impossible to continue my university studies. However, I am still here and looking forward to the end of semester. Once again, thank you very much.
Your encouraging words really helped me a lot. Maryana [19/05/03]

Kift (2004)
Strike whilst the iron’s hot

The potential for enthusiastic engagement in the curricula should be harnessed in the critical first days of the first weeks of the first year, thereby promoting a sense of belonging, so often missing for the contemporary learner.

Kift and Nelson (2005, p.229)
Contact with academic staff

Importance widely acknowledged, also value for money considerations

### Selected influences on student non-continuation, UK

<table>
<thead>
<tr>
<th>Influence (ranked)</th>
<th>Mid-1990s left</th>
<th>2005 poss leaving</th>
<th>2006-07 left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme not as expected</td>
<td>1=</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Teaching issues</td>
<td>5</td>
<td>3</td>
<td>2=</td>
</tr>
<tr>
<td>Lack of contact with staff</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

How to make best use of an expensive resource?
Data from c6900 1st year students in the FYE study

The staff with whom I come into contact are friendly

At least two members of the academic staff know me by name
Why students leave: Poor staff/student contact

I felt quite isolated in terms of studying. Lecturers spoke during lectures and then would leave the room, with no time for questions. During my entire first year I never once met my personal tutor. There seemed to be no interest in students’ personal needs.

I did **NOT** enjoy my experience what so ever, due to the lack of support from staff. I was never introduced to my personal tutor and felt like a number – not a person in a new [overwhelming] environment. Not one of my tutors spoke to me as an individual …
Staff/student relations – negative comments
(FYE survey)

Having a poor seminar tutor, who never seemed to get to know us, and never listened. Too many tutors for each subject, as they change after the 1st semester.

Hating the teaching staff as they are unhelpful. Be treated like I am 12 years old.

Communication with teachers, you can never find them, unless email them, not knowing who to ask help [from], not know where or who to get assignment and exam grades.
Students’ write-in comments: a digest

(From the FYE survey)
First-year experience – positive comments (FYE survey)
First-year experience – negative comments (FYE survey)

- Workload & time management
- New friends
- Feedback & assessment
- Teaching-related
- Curriculum aspects
- Finance-related
- Organisation & management
- Personal matters
- Induction
- Accommodation-related
- Homesickness & illness

Percentage of 5169 who commented
Curriculum for the first year (ctd)

1 Address needs of students. In the first year these are arguably more about learning to learn in higher education than anything else (as far as the cognitive is concerned)

2 Acknowledge students as individuals

3 Learning through as well as about the subject

4 Teaching for engagement. Not a simple continuation of school-based study: HE is different

5 Group-based study can
   ~ develop the social and ‘soft’ skills that are valued in ‘the world outside’
   ~ help in forming friendship networks

6 Assessment, especially formative
Some issues in assessment
(Formative, then summative)
Formative assessment

Black and Wiliam’s meta-analysis showed a size effect of 0.7

... formative assessment does improve learning ...

The gains in achievement [are] among the largest ever reported for educational interventions.

Black and Wiliam (1998, p.61)
Students need to know how they are doing

I found having large blocks of work without assessment difficult – you don’t know if you are grasping it or not until exam time! Assignments weekly would be better from my point of view.

*Female in her 30s, pursuing a science-based Foundation Degree programme*

The less individuals believe in themselves, the more they need explicit, proximal, and frequent feedback of progress that provides repeated affirmations of their growing capabilities.

*Bandura (1997, p.217)*
Feedback needs to be supportive as well

Students observed that feedback was given in such a way that they did not feel it was rejecting or discouraging …

[and] that feedback procedures assisted them in forming accurate perceptions of their abilities and establishing internal standards with which to evaluate their own work

Mentkowski and Associates (2000, p.82)

Note the implicit emphases on the self (the E of USEM) and on metacognition (M)
A typology of formative assessment

<table>
<thead>
<tr>
<th>From</th>
<th>Formal</th>
<th>Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>Probably the main approach in HE</td>
<td>Where circumstances permit</td>
</tr>
<tr>
<td></td>
<td>Via peer assessment activities</td>
<td>Over coffee or in the bar</td>
</tr>
<tr>
<td>Peers</td>
<td>Problems if assessor is mentor, supervisor</td>
<td>In work-based situations</td>
</tr>
<tr>
<td>Others</td>
<td>Only if an assessment requirement</td>
<td>Where student is acting self-critically</td>
</tr>
<tr>
<td>Self</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Guiding learners through the transformation from authority dependence to self-authorship is a primary challenge for twenty-first century higher education

Baxter Magolda (2009, p.144)
The Institute is moving from a position of being primarily ‘teaching’ to one which empowers students personally and socially, enhances their self-esteem and enables them to take responsibility for their own learning.
Weakenes in formative assessment

In 49 per cent of cases, marking systems could be improved particularly in respect of feedback to students. This sometimes lacked a critical edge, gave few helpful comments and failed to indicate to students ways in which improvement could be made.

QAA (2001, para 28: Subject overview report, Education)

See also QAA reports on
- Foundation Degrees, 2003;
- Learning from Subject Review, 2004
Feedback – negative comments (FYE survey)

Being told by my personal tutor in an informal feedback that my work was considered by them to be "crap”.

Handing in our first term work and having a one on one crit. Too much negative feedback to end with.

Feedback takes too long.

No or little feedback on assignments essays. [Feedback] is essential particularly for first year students to learn from mistakes. Poor teaching provided by particular lecturers. Seminars [are] a gross let down.
Assessment in academe compared with that in the world of work

Something of a parody follows...
Problems set in academe

are quite often characterised by

• being deliberately formulated
• being well-defined
• the availability of most if not all relevant information
• having a ‘right’ answer...
• ... and one method of reaching it
• being of limited intrinsic interest
• their detachment from ordinary experience

Based on Hedlund and Sternberg (2000, p.137)

Disciplines vary, of course, in the extent to which these apply
The taxonomy for learning, teaching and assessment

*(Anderson and Krathwohl, 2001, as viewed by Knight, 2007)*

<table>
<thead>
<tr>
<th>The knowledge dimension</th>
<th>1 Remember</th>
<th>2 Understand</th>
<th>3 Apply</th>
<th>4 Analyze</th>
<th>5 Evaluate</th>
<th>6 Create</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factual (U)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual (U)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural (U,S)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metacognitive (U,S,M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Academic emphases?
Problems in the world of work

are often characterised by

• ‘happenstance’
• ‘messiness’
• incompleteness of information
• multidisciplinarity
• engagement of others

and possibly

• the pragmatic necessity to ‘satisfice’ (i.e. obtain a ‘good enough’ > a perfect outcome)
The taxonomy for learning, teaching and assessment
(Anderson and Krathwohl, 2001, as viewed by Knight, 2007)

<table>
<thead>
<tr>
<th>The knowledge dimension</th>
<th>The cognitive dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Remember</td>
</tr>
<tr>
<td>Factual (U)</td>
<td></td>
</tr>
<tr>
<td>Conceptual (U)</td>
<td></td>
</tr>
<tr>
<td>Procedural (U,S)</td>
<td></td>
</tr>
<tr>
<td>Metacognitive (U,S,M)</td>
<td></td>
</tr>
</tbody>
</table>

Employment emphases?
# Educational objectives and their assessment

<table>
<thead>
<tr>
<th>Type of objective</th>
<th>Problem</th>
<th>Solution</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional</td>
<td>Specified</td>
<td>Specified</td>
<td>Prescriptive</td>
</tr>
<tr>
<td>Problem-solving</td>
<td>Specified</td>
<td>Open</td>
<td>Responsive</td>
</tr>
<tr>
<td>‘Expressive’</td>
<td>Open</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Open</td>
<td>Open</td>
<td></td>
</tr>
</tbody>
</table>

NB: Some alleged problem-solving is essentially puzzle-solving, where there is a right answer. This should be located in Row 1.
Many employability-relevant achievements are complex, and are best demonstrated in authentic or quasi-authentic settings.

(T)reating (required competences) as separate bundles of knowledge and skills for assessment purposes fails to recognize that complex professional actions require more than several different areas of knowledge and skills. They all have to be integrated together in larger, more complex chunks of behaviour.

Eraut (2004, p.804)
The holistic nature of learning suggests a clear need to rethink and restructure highly segmented departmental and program configurations and their associated curricular patterns.

Curricula and courses that address topics in an interdisciplinary fashion are more likely to provide effective educational experiences than are discrete courses accumulated over a student’s college career in order to produce enough credits for a degree.

Pascarella and Terenzini (2005, p.647)
Challenges - Coverage

Ensuring coverage of all educational aims, particularly in a modular scheme

Some issues

~ Students’ selection of academic routes
~ Over-assessment of some aims (e.g. presentations)
~ Non-assessment (or student avoidance) of others
Challenges – Assessment (summative)

Awkwardness of fit with programme structures

~ Some desirable achievements are slow-growing crops
~ They may take a year (and more) to be developed, and it is inappropriate to assess them within individual modules
~ Can they be assessed across the whole year?
Some key questions (not an exhaustive list)

1. Could curricula better encourage:
   - student engagement (especially from the moment they arrive)?
   - student learning?
   - the development of student employability?

2. In what ways do curricula encourage personal autonomy?

3. What might adversely affect students’ commitment to their studies, and where can something be done to deal with the problem(s)?

4. How are the various achievements expected of students assessed? Is there a need for any changes in assessment approach?
Much of what I had to say related to employability (though I use the term for a much broader appreciation of what higher education is for).

The Higher Education Academy has published a series ‘Learning and Employability’ which can be found at the URL below. There are various angles on employability, and colleagues with different roles in DkIT will probably want to follow up particular titles.

www.heacademy.ac.uk/resources/publications/learningandemployability

Colleagues with particular subject disciplinary interests might find the relevant subject area of the HE Academy has some useful stuff to offer as well.

This entails going to www.heacademy.ac.uk and opening the drop-down list of subject centres.

Earlier work in the area of employability can be found in two books that I co-authored with the late Peter Knight:


The report of the survey of first-year experience in UK HE can be found at

www.heacademy.ac.uk/ourwork/research/surveys/fye

The Phase 1 report deals with the on-course experience; Phase 2 with what those who left HE had to say. How much can be translated directly into the Irish context is unclear, given a number of differences between national systems.