

An aerial photograph of a vast sand dune landscape. The dunes are characterized by numerous parallel ridges and valleys, creating a rhythmic, wavy pattern across the terrain. The sand is a light, pale yellow color. In the lower right foreground, a single starfish is visible, its five arms extending outwards. The sky above is a clear, pale blue, suggesting a bright, sunny day. The overall scene is serene and natural.

The STAR Project

(Student Transition and Retention)

Responding to Changes in Pre-entry Qualifications

Anthony Cook, University of Ulster

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SUMMARY

Recent trends in the qualifications presented by traditional students have led to a restricted content and more defined assessment schemes with detailed outcomes and criteria. In addition, students can repeat aspects of the assessment to improve their grades. This appears to have led to a teacher-dependent, risk-averse learning culture, culminating in the oft-heard phrase “Just tell me what I need to know to pass the assessment”.

Some attributes and attitudes of incoming students depend on current teaching and assessment methods in AVCEs and A level examinations. Appropriate responses include aspects of communicating with applicants prior to entry to better prepare them for HE, induction procedures which are sensitive to the rapid changes experienced by new students, and changes in the first year curriculum and assessment which may be necessary to adapt students to the learning culture at University.

Keywords: student retention, first year curriculum, assessment.

INTRODUCTION

The STAR (Student Transition and Retention) project is concerned with the transition from one part of education to the next. These transition processes are conceptually simple. We need to know the start point and the end point of the process and then design a way to get students from one to the other. For the first year curriculum this implies knowledge both of the desirable qualities in students progressing to year 2 and also the attributes and ambitions of students on entry.

Recent pressures on schools to perform to a set of targets has inevitably led to an improvement in standards at school measured as exam success. Each year more students are gaining higher grades and it is becoming more difficult to discriminate between applicants on the basis of grades alone. As a greater proportion of the 18-year-old population is admitted however, we have also gained a problem of understanding what it is they know and can do when they present with Cs and Ds at Advanced or with Advanced Vocational Certificates of Education.

Transition then requires knowledge of the destination and the point of departure and involves the activities of teachers, pupils and examining boards prior to entry and those of students and academic staff in year 1 at university.

THE DESTINATION

Most academic staff could list the sorts of qualities they deem desirable in students entering year 2 of a degree programme. Such a list would undoubtedly include aspects of independent learning including the ability to find and interpret information and of being highly motivated. There would also be a component of subject expertise so that a particular knowledge base could be guaranteed when teaching in Year 2. Added to these would be some notion of students being socially well-adjusted so that they could participate effectively in group-work and have a mature attitude towards an appropriate work- life balance.

The destination however, should also include positive student attitudes towards, for instance, plagiarism, resits and attendance.

THE POINT OF DEPARTURE

The attributes of students on arrival at University are much less well defined. Although University staff may know how they might like the new intake to be, new students seldom conform to these standards. Students enrol with a variety of qualifications and these themselves have changed rapidly over recent years. Further, new students respond in a range of different ways to the new freedoms that they acquire in higher education. Differing styles of teaching, learning and assessment in the various pre-entry qualifications also add to the diversity among incoming students. While diversity in itself is not a problem, changes in pre-entry qualifications are resulting in these differences often being unrecognised among those delivering the first-year curriculum in Higher Education.

Assessment Schemes

Changes in the ways in which 2nd level qualifications are assessed have led them away from the pattern common in Higher Education.

In A level Biology (NI) (CCEA 2002) about 80% of the marks are awarded for examinations. There are a total of 6.75hrs of examination time spread over two years with the maximum duration of an examination being 90min. Distributing the marks over the available time indicates that a candidate should spend no more than 18 minutes on any one question. In the examination a total of 17% of the marks are awarded for answers written in continuous prose. Even allowing that most candidates will be taking three A levels, this examination schedule represents approximately half the intensity of examination typically experienced in Higher Education (3 hr examinations and fewer questions).

In the AVCE Science (Double Award) 4 of the 12 modules are externally assessed by examination representing 33% of the marks. Each of these four examinations is 90 min. Again this represents an intensity of examination much lower than that commonly experienced in Higher Education.

The coursework in A level Biology represents about 20% of the available marks. Coursework can be repeatedly refined and re-submitted to improve the grade awarded. Thus one teacher commented:

“Teachers ensure at all times that pupils remain “on message”. All pupils submit at least two drafts. Some enter their coursework project in January and re-submit in June to secure an improved grade.”

In the AVCE Science (Double Award) (Edexcel, 2000) eight of the 12 modules are assessed by portfolio. Portfolios are written to an assessment grid which dictates the content and the marking criteria for each grade. Thus in the module *Investigating Science at Work* (Edexcel), students prepare their portfolio including detailed reports on:

“two local (regional or national if not available locally) organizations you have studied that use scientific knowledge or processes (one must be involved in manufacturing or production, and one provide a service). The reports must describe the type of scientific work, including the number and type of people who work in the organization.”

To achieve a grade A their work must show 13 qualities, 3 examples of which are:

- *a survey of organizations and two reports describing the type of work that takes place in two organizations;*
- *an identification and use of the main source of information and, where appropriate, additional sources of information to support your findings;*
- *an outline of the basic economic costs and benefits of the science used in the two organizations, and the ways in which the organizations and their product’s impact on the local community.*

Edexcel (2000)

There is much to be commended in the level of explicitness in secondary assessment but when students arrive at a typical University there is often not the same level of advice and support. In a University system there appears to be a greater assessment load; there is more coursework (certainly it is required more frequently) and a greater examination load. There is much less support; student groups tend to be larger and individuals can become anonymous. Furthermore since the teacher is also the assessor, the appropriateness of staff assisting students directly with assessment is questionable. This can result in confusion leading to the student comment:

“I did not know what was expected of me in some assessments”.

University of Ulster student

Thus the intensity of both examination and coursework is much higher at University than in secondary education and the availability, even sometimes the propriety, of tutor support for assessment is limited.

Teaching and Learning Methods

Prior to entry, teachers largely manage pupils' learning. Thus information about methods from teachers include:

- *“Past examination questions are unpacked and pupils taught to select and highlight key words.”*
- *“Targets are set by teachers”*
- *“Pupils are taught to focus their learning when reading.”*
- *“Pupils are issued with the syllabus requirements and the marking criteria are highlighted to raise pupils' awareness of the standards required.”*
- *“Pupils and staff feel that they belong to a community. We are mutually dependent. For this reason staff will support learning, recognising pupils difficulties with study demands. Pupils are, in turn, motivated by a sense of belonging.”*

Secondary School Teacher

In a target driven system in which school performance is judged by the examination performance of its pupils, teacher centred teaching is to be expected; little should be risked for attributes that are not measured.

Independent Learning

Most higher education staff would claim the promotion of independent learning as a major goal. Students will have to be independent at the end of the course and that transition tends to start early. In secondary education, independence, although desirable, is not a major goal. Thus in discussing independent learning by pupils one teacher commented:

“Most teachers feel that there is less independent learning now than in previous years. The reality is that learning is structured and focussed. All pupils are encouraged to think and work independently- but there is a strong element of guidance.”

And in discussing transition to University:

“Pupils have been accustomed to teachers issuing examination specification and marking criteria. They still need this guidance to continue at university.”

“To date, their learning has been structured and supported, with heavily supervised study and parental involvement. What happens when all of this is suddenly removed? ”

The Role of the Examination Boards

Examining boards produce syllabuses and a wide range of supporting literature. This indicates not only the syllabus content and assessment tools but also the level of treatment expected. Past papers and associated mark schemes are published, as is a chief examiner's report which comments on the performance of the year's assessment. Teachers welcome such openness and explicitness since it helps frame

the way the syllabus is delivered and it is welcomed by pupils since it helps define how much has to be learned.

There is obviously a close relationship between the syllabus, the teachers' guidance, the examination questions, the mark schemes and the chief examiner's report. Tracking through the evolution, marking and candidate performance on a question is informative. Most of what a candidate needs to know is in the guidance notes for teachers and clear guidance to teachers becomes advice to candidates about how little to learn. There is also some indication that where information is contained in more than one section of the syllabus then it confuses the candidates.

THE STUDENT VOICE

Students clearly know that there is a significant transition from school or college to University. Most manage it successfully but some find it difficult while others falter and drop out. When asked what was most difficult when joining the University few students put the difficulties of work first. Comments included the following:

- *Moving from the country to the city*
- *Transport to the university*
- *Getting lost in the university*
- *Making new friends since home friends tended to be of long-standing*
- *Language problems (international student)*
- *Adjustment from working (mature students)*

When directed towards more academic matters they cited:

- *Group working is difficult to achieve successfully – more training needed*
- *A lot is expected in presentations at an early stage e.g. use of Powerpoint – again more training needed*
- *Getting notes from WebCT is not always straightforward – needs to be clearly explained and demonstrated*
- *Intensity of continuous assessment*
- *Tend to leave all assessment until the last minute*
- *Not being chased for submission of work*

Their difficulties are in adapting to the University infrastructure and in dealing with assessment.

APPROPRIATE RESPONSES

University teachers need to communicate their expectations more clearly to schools and new entrants and to adapt their practices in year 1 to effect a smoother transition between secondary and tertiary teaching and assessment methods. The STAR project has identified a number of instances of good practice in promoting such a transition.

Information sent out prior to entry influences student attitudes. This can be in the form of workshops to give students better insights into the expectations of Higher Education and improve their decision-making or in better, more accurate, literature. Student mentoring around the time of entry also helps convey the information that incoming students need.

Once on campus students need to adapt rapidly to their changed circumstances since their first summative assessment may be only weeks away.

Extended induction processes tend to achieve three important functions. Firstly they help form rapid social contacts between students and between students and staff. Secondly they can communicate, in an immediate and practical way, the expectations of staff as far as academic standards are concerned. This can be reassuring for many students who are uncertain about their competence. Thirdly induction can convey some of the excitement in studying a subject in an open and investigative way and reinforce the intrinsic motivation students will need to be independent learners. Other practices which can ease the transition include the modification of assessment schemes to encompass, at least in year 1, some elements of the secondary system such as repeating assignments for better grades, the submission of drafts etc.

Finally it is important that teachers in higher education know and understand the changing nature of the teaching and assessment methods in appropriate pre-entry qualifications as well as the subject content since the student attitudes formed through the seven years of secondary education will far outlast their knowledge of the syllabus.

CONCLUSION

The schools, pupils and the examining boards form a triangle of success. The boards tell the teachers precisely what it is that the pupils should know, the teachers ensure that the pupils know it and the boards then test to see how *well* they know it. This target driven approach is leading to the syllabus and the information produced along with it *becoming* the subject. Many candidates are learning only what they need to know to get a good grade in the examination. The best candidates are as they ever were, - enthusiastic, interested and intrinsically motivated. The poorer candidates are however, able to gain relatively good grades by learning without great understanding, doing without knowing (or asking) why and repeating assessment until successful. They depend on teachers and parents for their motivation.

This appears like a good arrangement; it ensure good outcomes, the students know what they should know and the schools perform well against the performance criteria that they are set. It does not necessarily however, prepare students well for a higher education experience during which they will live independently, many for the first time, and be left to organise their own learning.

Teachers in Higher Education cannot conspire with the candidates to outwit the examiner because the teacher *is* the examiner. What we can do however is to develop transitional arrangements in year 1 which incorporate features of second

level teaching and assessment as a means to ease new students into year 2. This will become increasingly important as participation is widened.

REFERENCES

CCEA (2002). *GCE in Biology Specification*. Northern Ireland Council for the Curriculum, Examinations and Assessment. Belfast.

Edexcel (2000) *Advanced Vocational Certificate of Education (Double Award) in Science Compulsory and Optional Units*. Edexcel
<http://www.edexcel.org.uk/VirtualContent/29469.pdf> (accessed 26/04/05)

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