In a yearlong project, Britain's Business and Technology Education Council (BTEC) investigated why some students leave their educational programs before achieving their certificates or diplomas. The project drew information on completion rates from the BTEC database. Views of BTEC centers' staff were canvassed through a national survey covering 348 programs in business and finance, computing, and engineering. Center staff and BTEC's lead moderators shared views on good practice and the development work going on in their centers to improve completion rates. Field work visits involved interviewing program teams and 60 students and studying programs. A postal survey obtained insights from noncompleting students on their reasons for leaving their programs. Analysis revealed the following: personal attention was the basic principle behind good retention rates; most BTEC students left a program with some recorded achievement; getting a job was one of the main reasons for full-time students leaving programs; loss or change of employment and other work-related reasons were among the main reasons why part-time students left early; and most students who left early did so for program-related reasons, such as poor grades or poor achievement. Examples of good practice in centers include the following: improving personal attention, student support and personal tutoring; supporting large numbers of students; providing links with employers; dealing with anxiety; providing preenrollment attention; and using open and flexible learning techniques. (YLB)
staying the course
Most BTEC students follow a programme through to its conclusion, achieving the final award. Although it is not usual for them to leave a programme with nothing to show for their work - completing at least one module for instance - some students do leave before the end for a variety of reasons.

**WHAT**
causes students to leave their study programmes early?

**WHAT**
can centres do to maximise student retention rates?

**HOW**
can adoption of BTEC’s recommended procedures help?

In a year-long project, BTEC, the Business & Technology Education Council, has investigated why some students leave their programmes before achieving their awards.

This project, undertaken between 1 October 1991 and 30 September 1992, categorised the reasons and formulated a series of recommendations to reduce non-completion. The findings show how centres can improve completion rates through the implementation of BTEC policy and student-centred approaches.
One of the most comprehensive pieces of research undertaken by BTEC, this project drew information on completion rates from the BTEC database. The views of centre staff were also canvassed through a national survey covering 348 programmes in Business and Finance, Computing, and Engineering. Statistics on early leavers were obtained from programme leaders. Both non-completing and continuing students were consulted.

Centre staff and BTEC's lead moderators shared views on good practice and the development work going on in their centres to improve completion rates, as well as making recommendations to the project.

Fieldwork visits involved interviewing programme teams and 60 students as well as studying programmes.

A postal survey was carried out to obtain insights from non-completing students on their reasons for leaving their part-completed programmes.

The subsequent research involved detailed analysis of the reasons why students left early.

Registration by students with BTEC occurs early in their programme - not half way through or towards the culmination of activities. This affects completion statistics.
MAJOR POINTS

Personal attention is the basic principle behind good retention rates.

Most BTEC students leave a programme with some recorded achievement. In this context, completion of at least one unit is a minimum recognised achievement.

Getting a job is one of the main reasons for full-time students leaving programmes before achieving the relevant award.

Loss or change of employment and other work-related reasons are among the main reasons why part-time students leave early.

Most students who leave early do so for programme-related reasons, such as poor grades during the programme, or poor achievement in the end-of-year assessment.

Most BTEC students leave a programme with some recorded achievement.
...ACCORDING TO STUDENT ACHIEVEMENT BY SECTOR

<table>
<thead>
<tr>
<th>Sector</th>
<th>Business &amp; Finance</th>
<th>Construction</th>
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<tbody>
<tr>
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<td>67%</td>
<td>59%</td>
</tr>
<tr>
<td>FC</td>
<td>11%</td>
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<td></td>
<td>20%</td>
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<tr>
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<td>20%</td>
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<td>9%</td>
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<tr>
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<td>HND</td>
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<td></td>
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<table>
<thead>
<tr>
<th>Sector</th>
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<th>Science &amp; Caring</th>
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<tbody>
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<td></td>
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<tr>
<td>FC</td>
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<td>HND</td>
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<td>21%</td>
<td>16%</td>
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</tbody>
</table>

These charts are based on the numbers of students registered with BTEC during 1989/9, and achievements recorded at November 1992. Figures have been rounded down to the nearest whole number.
<table>
<thead>
<tr>
<th>Course</th>
<th>FC</th>
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<th>ND</th>
<th>HNC</th>
<th>HND</th>
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</thead>
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<tr>
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<td>9%</td>
<td>7%</td>
<td>9%</td>
<td>15%</td>
<td>7%</td>
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<tr>
<td>SERVICE INDUSTRIES (Includes Hotel and Catering, Leisure, and Performing Arts)</td>
<td>11%</td>
<td>12%</td>
<td>25%</td>
<td>13%</td>
<td>24%</td>
<td>8%</td>
</tr>
<tr>
<td>COMPUTING</td>
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<td>17%</td>
<td>17%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>AGRICULTURE</td>
<td>3%</td>
<td>21%</td>
<td>17%</td>
<td>17%</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

- FC - First Certificate
- FD - First Diploma
- NC - National Certificate
- ND - National Diploma
- HNC - Higher National Certificate
- HND - Higher National Diploma

- % of students achieving full awards
- % of students achieving one or more modules at pass grade or above
- % of students achieving no modules or fail/refer grades only
These charts are based on the numbers of students registered with BTEC during 1989/9, and achievements recorded at November 1992. Figures have been rounded down to the nearest whole number.

<table>
<thead>
<tr>
<th>Course</th>
<th>% of students achieving full awards</th>
<th>% of students achieving one or more modules at pass grade or above</th>
<th>% of students achieving no modules or fail/refer grades only</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC</td>
<td>13%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>FD</td>
<td>15%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>16%</td>
<td>23%</td>
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<td>ND</td>
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<td>13%</td>
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</tr>
<tr>
<td>HNC</td>
<td>11%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>HND</td>
<td>11%</td>
<td>14%</td>
<td></td>
</tr>
</tbody>
</table>

FC - First Certificate
FD - First Diploma
NC - National Certificate
ND - National Diploma
HNC - Higher National Certificate
HND - Higher National Diploma
...ACCORDING TO THE NATIONAL SURVEY

Statistics were gathered from centre staff on the reasons why 2,170 students, from 254 programmes, left early. The students, aged 16-plus, were on BTEC First, National, and Higher National award programmes in Business and Finance, Computing (Information Technology Application in the BTEC First award sector), and Engineering. A total of 1,086 students were on 120 Certificate (part-time) programmes with 1,084 students on 134 Diploma programmes (full-time).

The table below shows that employment-related reasons accounted for 31% of the total of students who did not complete Certificate (part-time) programmes, compared with 19% on Diploma (full-time) programmes. For 18% of Certificate students who left early, the work-related causes concerned loss or change of employment. The majority of Diploma students who left early for work-related reasons did so to take up full-time employment.

Also 44% of both Certificate and Diploma students who left early did so for programme-related reasons. Failure of their year one assessment was the major cause of programme-related non-completion, affecting 23% of Diploma and 17% of Certificate early leavers. In addition, poor grades caused 16% of Certificate and 11% of Diploma non-completers to leave. A further 13% of Certificate students and 18% of Diploma students left early for family/health or financial reasons.

<table>
<thead>
<tr>
<th>REASON FOR NON-COMPLETION</th>
<th>Certificate Programmes</th>
<th>Diploma Programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Took up full time employment</td>
<td>5%</td>
<td>18%</td>
</tr>
<tr>
<td>Loss of employment</td>
<td>7%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Change of employment</td>
<td>11%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Other work-related reasons</td>
<td>8%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Failed year one assessment (adjusted to exclude First Award from sample)</td>
<td>17%</td>
<td>23%</td>
</tr>
<tr>
<td>Obtaining poor grades</td>
<td>16%</td>
<td>11%</td>
</tr>
<tr>
<td>Did not like programme</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Other programme-related reasons</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Family/health etc</td>
<td>10%</td>
<td>13%</td>
</tr>
<tr>
<td>Financial reasons</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Unknown</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Other reasons</td>
<td>2%</td>
<td>8.7%</td>
</tr>
</tbody>
</table>
...ACCORDING TO PROGRAMME SELECTED

“Did not like programme” featured as a cause of not completing an award in Engineering First Certificate (13% of students who left early) and Diploma (12%), in Business and Finance Higher National Certificate (23%) and Higher National Diploma (15%), compared with very small proportions for the other awards studied.

Internal transfer affected 9% of Business and Finance non-completions at HND level, 20% of Computing, and 36% of Engineering.

Financial reasons were recorded for only a small proportion of early leavers. except in ITA/Computing, where in First Diploma they amounted to 10% and in National Diploma, 12%. (It is likely that the move towards full-time employment masks financial reasons.)

The proportions of family/health reasons fluctuated considerably between the various subject areas, being greatest for HND Business & Finance (18%) and First Certificate Information Technology Applications (27%).

It is likely that family/health, unknown, and financial reasons for leaving early have to some extent become mixed, as these findings have been based on records kept by staff who may not have been fully aware of students' personal circumstances.
...ACCORDING TO AWARD LEVEL

The project looked at the achievement of students who registered in 1988-89, whose awards had been processed up to Spring 1992.

A total of 62% of students achieved First Certificate awards. The figure for students who obtained success in one or more modules was an additional 13%.

A total of 69% of students achieved First Diploma awards. The figure for students who obtained success in one or more modules was an additional 15%.

A total of 60% of students achieved National Certificate awards. The figure for students who were successful in one or more modules was an additional 16%.

A total of 72% of students achieved National Diploma awards. The figure for students who succeeded in one or more modules was an additional 14%.

A total of 70% of students achieved Higher National Certificate awards. The figure for students succeeding in one or more modules was an additional 11%.

A total of 73% of students achieved Higher National Diploma awards. The figure for students succeeding in one or more modules was 11%. At this level, the total non-completion figure of 14% (all percentage figures have been rounded down to the nearest whole number) conceals a proportion of committed students who have transferred to non-BTEC provision such as degree programmes, especially in Engineering and Computing.

Overall, students aged 20 or below on registration were found to be more likely to complete an award in the three Board areas studied than those aged 21 or more on registration. The "gap" between completion rates for the two age groups was greater for Diploma (full-time) than for Certificate (part-time) programmes, suggesting that to some extent the over-21 group found Certificate programmes to be more "user-friendly".
...ACCORDING TO THE EARLY LEAVERS

The postal survey of early leavers revealed that 45% left for programme-related reasons, 26% left for work-related reasons and 28% for "personal" reasons.

The proportion citing "personal" was higher than that obtained via staff respondents and this may be because staff taking part in the national survey may not have been fully aware of the personal factors in operation - i.e. taking up full-time work may have concealed family or financial problems.

...ACCORDING TO CENTRE STAFF

Students who left early may have underestimated the commitment required on all BTEC programmes, according to centre staff who took part in the project. Some students had difficulty in taking control of their own learning and in making the transition from GCSE. Students were finding it more difficult to obtain day-release, and those who did were sometimes unable to attend because of their work commitments.

Employers might also have been unsupportive in various ways. Students on day-release or evening programmes were also under a lot of pressure in combining study with work, family, and travel, they suggested.
...ACCORDING TO
STUDENTS ON CAMPUS

In interviews conducted during fieldwork, BTEC students said they valued peer group support and shared working, and they enjoyed practical, active, “real” assignments. They appreciated staff with a friendly, approachable manner who would listen to them.

Difficulties mentioned by students included obtaining access to advice, equipment, and resources, and the problem of “bunching” of assignments.

Students in all three areas studied were said to have difficulties with basic skills such as numeracy and communications. Students in Engineering and Computing were found to lack background and understanding in Maths and Science.

Some students expected Engineering and Computing programmes to be more “practical” and “hands-on”. The technical aspects of Computing programmes, particularly languages, caused problems at First and National levels, as did the quantitative aspects of Business and Finance programmes.

...AND ACCORDING TO GENDER

In almost all awards, female students were found to achieve a greater percentage of full awards than male students. This was true both in areas where there are large proportions of female students, and also in those areas where they traditionally form only a small minority.
GOOD PRACTICE AT BTEC CENTRES

The following are examples from centres where systems have been designed to support students and provide the personal attention needed to achieve good completion rates within available resources.

IMPROVING PERSONAL ATTENTION

Walsall College of Arts and Technology has adopted a Student Focus Initiative. All students on programmes of more than 15 hours' duration enter the college via a Centralised Admissions Unit. This ensures that students obtain appropriate guidance and counselling and access to Accreditation of Prior Learning (APL). An individual learning programme is negotiated with the tutor, and the Student Focus team for each programme group discusses student progress at six-week intervals. Detailed computerised records of attendance and progress are kept at divisional level. Students have access to a wide range of student support services.

This initiative operates within a whole-college Quality system which includes a range of instruments designed to obtain student and staff feedback and channel it into action planning at programme level and above.

Learning support is offered through three open access workshops in Communication, Numeracy and Information Technology.

Increased emphasis has been given to the support and guidance elements of the First Diploma in Information Technology Applications. A total of four and-a-half hours a week, out of a 21-hour programme, is devoted to problem solving and aspects of common skills in relation to the single weekly assignment and enables individual action-planning and review.

There is also a general tutorial curriculum with planned activities including counselling and progression advice.
STUDENT SUPPORT AND PERSONAL TUTORING

At The University of Glamorgan a whole-college approach to student support and personal tutoring is under development. The role of the personal tutor has been recognised as vital in identifying problems early and referring students for help as appropriate. A policy has been adopted which defines the role of the personal tutor, acknowledging that tutoring can be pro-active and contribute to personal development, and arranging for staff development and training to carry out this role.

SUPPORTING LARGE NUMBERS OF STUDENTS

At The Nottingham Trent University the use of staff and student time has been reorganised on Higher National Business and Finance programmes. HNC and HND programmes are integrated. Learning is managed in lectures (140 students), workshops (24 students) and GAS groups (group advisory sessions - with eight students) to give students better access to lecturers and peer group support.

The GAS groups are a key feature of the system. The GAS tutor takes the role of the personal tutor, tracking the student's progress and assessing the cross-modular core. The tutor reports problems at regular team and review meetings.

The programme is organised into time blocks, each with a theme, supported by a comprehensive booklet.
LINKS WITH EMPLOYERS

At Wakefield District College there is an active Employer Liaison Committee for Business and Finance programmes. Employed students are given an evaluation questionnaire to take back to their supervisors. This gives line managers a chance to discuss the relevance of the provision to the company's needs. Line managers also take part in the assessment of a work-based assignment for Higher level students, devised by the students themselves and related to their work.

ANXIETY TACKLED

At Stockport College of Further and Higher Education the programme team was concerned about non-completion on the Higher National Certificate programme in Business and Finance, which has a high proportion of mature women students. The main causes of non-completion seemed to be the volume of work, the difficulty of the quantitative elements of the programme, and general anxiety and lack of confidence. The team adopted a number of measures which have resulted in a reduction of non-completion rates from 15% to about 5%.

Recruitment methods were developed to ensure that all students understood the nature of the programme. Induction was also developed to ensure that it included discussion of ways in which the student might involve the employer in supporting the programme. The programme structure was altered, so that student confidence could be built up in the first term. For example, the order of modules was changed so that quantitative elements such as statistics came later in the programme. One-to-one tutorials were timetabled to occur five times a year, and learning support was provided.

The key feature of change was the conscious alteration of the "culture" of the programme. The programme team decided to be more nurturing and caring, and to advertise this to students in order to make it easier for people to admit they have difficulties.
PRE-ENROLMENT ATTENTION

At Park Lane College, Leeds, attention is paid to the pre-enrolment process for First and National Diploma students on Business and Finance programmes. Applicants' evenings are held for prospective students and their parents. The parental link is regarded as particularly important in maintaining student motivation. Over the summer pre-enrolment period, greetings cards are sent out to maintain links.

While at the college, students are asked to complete mid and end-of-programme evaluation questionnaires. The outcomes are discussed at meetings between the staff and student representatives. Action plans are drawn up and each student receives a copy. There is commitment by the programme management team and class tutors to carry out the plans.

FLEXIBLE LEARNING

At Coleraine Technical College development work is under way to increase the use of flexible learning approaches in Engineering. The normal timetable is suspended for a week for all First and National Diploma students while an Integrative Assignment is carried out. There is one week's preparation during which students are counselled and advised on research and resources. All facilities such as the library and laboratories are open during the week of the IA and open learning materials are available. Facilities are also available at the local university. Students are expected to negotiate their access to resources, and work in carefully selected groups. Assessment methods include personal interviews and presentations to an audience.

Industrial work experience and visits are also used for assessment. Structured tasks are set up around visits and help is solicited in advance from the organisation being visited.
BTEC ensures that its name is applied to good quality provision, without placing undue demands on centres.

BTEC will continue to publish guidance on learning and will encourage the development and use of open and flexible learning techniques.

BTEC has introduced new Criteria For Quality to monitor its programmes.

BTEC offers centres the following suggestions aimed at maximising student retention rates...

*(the asterisk * indicates that the item features in the Criteria For Quality)*

A PROFILE OF THE IDEAL BTEC PROGRAMME
How centres can maximise their retention rates - a guide on how best to develop programme features

A centre which wishes to maximise its student retention rates should ensure that

Marketing and Recruitment methods provide the individual (and, where appropriate, her/his parents) with real insight into the nature of the programme and its progression routes, and that contact is maintained through to enrolment.

Enrolment includes meeting the teacher or tutor.

Induction includes diagnosis of possible problem areas and Accreditation of Prior Learning (APL).*

After the introductory phase, Induction continues in a form which is integrated into the assignment programme. This would include an introduction to study skills and self-management of learning to which all staff would contribute.
A Personal Tutor System is in place to provide the opportunity for tutorial time for the student individually or in a small group. Reviews of Progress* and Negotiation of Learning Goals should take place regularly.

Support studies*, relevant to the student's main programme, are planned.

There is access to resources, equipment, and advice, to support the student's independent study.

Assignments are experiential, active, and "real"*, and offer opportunities for peer group support and assessment, and employer involvement*.

Common skills are integrated and progressively developed*, and "underpinning" subjects such as maths and science are related to the assignment programme as closely as possible.

Open and flexible learning techniques are used, particularly for older students.

Timetabling of assignments is adhered to and "bunching" of assignments is avoided.

Access is provided to personal support services such as counselling, plus access to career and Higher Education progression advice.

There is a programme quality system that includes opportunities for student feedback which is noted and acted upon*.

There is a staff development programme* covering student-centred learning approaches.
Non-completion is a cause for concern, but there are ways in which BTEC and its centres are achieving and maintaining good retention rates.

First, and most important, is PERSONAL ATTENTION.

The project has identified personal attention as being the basic principle behind good retention rates. The more effectively a centre can develop its systems and programmes to

- provide support for the student
- help the student make the most of learning opportunities
- maintain the students' motivation
- and listen to and learn from the student

the better its completion rates are likely to be.

This requires attention to marketing, enrolment, induction, programme design, learner support, tutorial systems, teaching and learning styles, counselling and progression advice, quality systems, and staff development.
During the review and design of BTEC programmes and the design of BTEC General National Vocational Qualifications (GNVQs), BTEC will work to ensure that

Syllabus overload, overlap, and obsolete material is cut out.

Programme content is vocationally relevant.

Option modules offer, where possible, different routes - i.e. "more technical" and "less technical" routes.

Integration of underpinning knowledge, such as maths and science, is encouraged.

Progression from GCSE and students' other various starting points is properly taken into account.

The age profile of different awards is borne in mind, particularly in drawing up guidelines.

The overriding objective in encouraging good retention rates is to emphasise the importance of developing systems which give as much individual attention as possible to our students. This has always been a guiding principle of BTEC and will continue to be so.

BTEC will continue to develop and publish guidance which encourages and illustrates flexible approaches to learning. Guidelines will continue to encourage the development of collaborative, "real", and vocationally-relevant assignments. They will illustrate ways of assisting students to become independent learners, and indicate ways of supporting and exploiting the experience of adult learners.

BTEC will also develop its monitoring processes to incorporate information on completion rates for individual programmes.

The overriding objective in encouraging good retention rates is to emphasise the importance of developing systems which give as much individual attention as possible to our students. This has always been a guiding principle of BTEC and will continue to be so.
THE GNVQ FACTOR

The good practice identified in this project as being the key to good retention rates is embedded into the design of BTEC GNVQs (General National Vocational Qualifications).

As BTEC GNVQs become available, corresponding First, National, and Higher qualifications will be phased out over a sensible timescale.
ACKNOWLEDGEMENTS

BTEC would like to thank all the staff and students who took part in this project.

BTEC also acknowledges use in its research of publications by many colleagues in the field.