

ESRC FUNDED SEMINAR SERIES

How to Motivate (Demotivated) 14-16 Year Olds, With Special Reference to Work Related Education and Training

Seminar 4:

Motivating 14-16 Year Olds to Invest in Learning and Aim for Progression: Scoping and Evaluation Part I

Friday 19th September

Andrew Watson (SWA Consulting) ‘Evaluation of New Approaches to Work-Related Learning at Key Stage 4’

The Projects

1. 35 Key Stage (KS) 4 Demonstration Projects. Conducted from 1997/8-1999/2000. Lasted 1 or 2 years. Some were for Year 10, some Year 11, some both.
2. 86 Standards Funds Projects. 1 year projects in 1998/9 only.
3. 21 Action Research Projects (ARPs). Conducted from 1998/9-2000/1. All lasted 2 years.
4. 14 Education Action Zones with work-related training components. Conducted from 1998/9 onwards. Of various length.

Going to focus here on the ARPs.

Typical Components

ARPs can cover various possible alternatives:

- (i) a substantive alternative curriculum – pupils are off the school curriculum for 2 years. They typically have 2 days per week following the work-

related component off-site, and 3 days per week following what is left of the national curriculum.

- (ii) Enhanced work experience.
- (iii) Joint programmes with Further Education (FE) or training providers.
- (iv) Vocational GCSEs NVQ/GNVQs.
- (v) Different teaching styles, project work etc.
- (vi) Mentoring, residentials, group work.
- (vii) Exploitation of ICT

Nearly all involved (ii) and (iii).

Objectives for ARPs

National objectives:

- (i) to improve motivation and attitudes
- (ii) to increase skills and knowledge
- (iii) to improve attendance and behaviour
- (iv) to raise attainment.

Latter 2 objectives are quantitative, the former 2 qualitative. (ii) in particular is difficult to measure/evaluate.

The Sample

103 participating schools (100 be the end of the projects). Minimum number of schools on a project was 1, maximum number was 18.

878 students (655 at the end) in the project group. Minimum of 13 students in a project, maximum of 117.

767 students (723 at end) in the comparator group. Less likely to drop out since less to do to actually be involved.

60% of sample were boys.

Comparator group were difficult to select, for 2 reasons. First, they are not receiving an enhancement being given to others, and therefore secondly, they get nothing out of the project, so little incentive to participate. Fall-back positions were people from

previous years in the same school and LEA averages. Researchers tried to select people with similar KS3 scores, gender mix etc.

Most (80%) of those selected for enhancement are disaffected, as shown by absenteeism, poor behaviour, low self-esteem, and/or subjective teacher assessment. The other 20% were from a.) mixed ability groups (and so random who got picked), b.) students making a choice in Year 9 to be involved (free to choice to be involved), or c.) guided selection e.g. less able pupils advised to try. Due to this mixture, aggregate data across all projects can be misleading, since there could be differences in behaviour between the 80% and 20% groups.

Methodology

Difficult to measure whether concepts such as motivation have increased. Therefore ask what would you expect to see if motivation had increased, and measure those things.

There were local evaluation strategies for each of the 21 projects, since each was designed to be a self-standing project, with a minimum level and standard of data required. There was limited fieldwork by national evaluators, but mainly just in a visiting capacity.

Data produced were at the pupil level.

Was an emphasis in the results on 'distance travelled' i.e. improvement or value added. Use the 'Jesson' approach – attempt to anticipate on the basis of KS3 SATs what students might get for KS4 scores. Can then compare this distance travelled for the project and the comparator groups. Have to worry about causality though – can any improvement in scores be attributed to project, or were other factors changing over the same period e.g. family background.

Data Sources

- Student questionnaire – baseline and project end.

- Management information – baseline, end of year 1, project end.
- Project reports – LEA or local evaluators.
- SWA fieldwork
- Data from both questionnaires conducted on 409 project and 341 comparator pupils.
- Full data, including KS3/KS4 scores and destinations, available for 242 (185) to 330 (319) students.

Findings from Student Questionnaires

Following involvement in a project:

Selected positive findings:

- fewer students say they truant school
- more confident in talking to adults

Selected negative findings:

- proportion thinking school a waste of time increased (+5%)
- only about 50% thought good behaviour in school breaks is important
- lower self-esteem rating at coping with new situations (-5%) – perhaps become less gung-ho as get older
- exams seen as less important for choosing job (-16%)
- reduction in viewed importance of good GCSEs for getting a job (-7%).

Outcomes

1. Effect on Motivation and Attitudes

Students started with very negative views of themselves, as well as their schools. Outcomes were very mixed even within the same projects. For example, some pupils made major strides in their motivation and attitudes, while others dropped out. Attitudes to the enhancements themselves improved, more than to the schools. Self-esteem seemed to rise because of the fresh start in vocational setting with other adults. The vocational setting is important – pupils react better to interaction with adults there

than if adults come into their school. Regular feedback and encouragement is also crucial.

2. Effects on Skills and Knowledge

Focus on skills and knowledge that help post-16 e.g. enhance employability. Pupils seem to have a low understanding of their own strengths and weaknesses, and of options post-16. Their awareness is increased by involvement, though not teacher inputs. For good outcomes, pupils enjoy early experience of post-16 learning styles (e.g. being 'treated like adults'). Preparation for, induction to and support during placements are also important determinants of success.

3. Attendance

Unauthorised absences fell in KS4 Demonstration Projects, but there was a much more mixed picture with ARPs. Note that the distinction between authorised and non-authorised absences is deceptive, therefore used aggregate absences. Overall, absences lower in the comparator group than the project group. Within the project group, absences off-site began lower than absences on-site, but became higher over time. It seems that off-site work lost its novelty and excitement. Often pupils changed employers in their second year as well, which proved disruptive. Finally, there was an important influence of peer groups ('team spirit') on absences whilst on the enhancement.

4. Behaviour

Results show there are no 'quick fixes' for improving behaviour – need constant support, immediate feedback and constant vigilance – i.e. a daily review. Question – why can't parents provide this support and care, why are outsiders needed?

There was some interesting use of group loyalty as an incentive for better behaviour – e.g. discuss how one person lets the group down if absent or late. Students therefore see actual consequences of their actions in real life situations. In school their absence does not really affect anyone else.

Exclusions go down over time, but for the comparator group as well as the project group.

5. Attainment

Average points scores actual lower for the project group (16) than for the comparator group (19), and both much less than the national average (28). Note there is much variation though – highest score was 53 in the project group and 41 in the comparator group. Many more NVQ/GNVQs were awarded amongst the project group than amongst the comparator group, although this is not surprising as pupils need special dispensation to enter for them.

Best news on attainment for the projects is the proportion leaving school with no nationally accredited awards – 12.2% in 1999/2000 of the project group, which is only slightly higher than the national average (11.3%). Figure for the comparator group was 15.8%. The projects therefore seem to retain students within the system who otherwise would have left.

In terms of distance travelled, in 8 of the projects, value added in the project group was greater than in the comparator group. In 4 of these, value added in the project group was also higher than the national median.

An early award (e.g. a First Aid certificate) was seen as a useful motivator for further attainment. Also important to keep targets simple, e.g. 1 NVQ at a time.

6. Destinations

Somewhat disappointingly, fewer in the project group went into full-time education or government training post-16, compared to the comparator group. More in the project group go into employment or the ‘other/not settled’ category than the comparator group.

Students tend to follow related paths post-16. For example, if they do a hairdressing placement they stay in hairdressing post-16, since they have found a field they can survive in.

Summary – Success Factors for Projects

- Clarity of purpose/objectives.
- Logistics and communications.
- Integration with other initiatives.
- Relationships with other agencies.
- Staff development and staff continuity.
- Equal opportunities.
- Quality of learning environment.
- Celebrating success.

Questions from Audience

What are the policy implications – should we expand 14-16 vocational education?

- yes, though can achieve outcomes without vocational context, since the key aspects of the projects are about relationships, attitudes and positive engagement, rather than KS4 attainment.

Are the projects cost effective?

- difficult to answer, since the benefits to society, e.g. reduced crime, are largely unknown.

The results suggest that the projects actually encourage pupils to go into employment, after getting a feel for it in their placements, post-16, rather than continuing in education. What, therefore, are the benefits of the projects?

- the main benefit is in retaining pupils within the system, at least pre-16.

John Mattick (OFSTED) ‘Aspects of “Why” and “How” in Work-Related Learning and Inclusion: Perspectives from Inspection’

Present of summary of evidence on work-related learning (WRL) using evidence from OFSTED reports on school inspections, as well as surveys from 1996 onwards.

Survey of Vocational GCSEs, 1996

Some findings:

- Some courses proving successful and popular, e.g. business studies, media studies. Others struggling though, e.g. horticulture, catering.
- These courses are not easy options.
- Students who take these courses enjoy them the most of all their GCSE courses, and usually obtain their best scores in them.
- Those who struggle on these courses are the ones who have always struggled.

Work Related Aspects of the Curriculum in Secondary Schools, 1998

This survey revealed what it is important for WRL activities to develop:

- An awareness of the diversity of industry.
- Revealing the relevance of what is learned in school for the real world.
- Key skills.
- Understanding the economics of companies (profits etc) so pupils can see what they can have an impact on.
- A positive contribution of pupils.
- Enthusiastic pupil response.
- Application of key skills, to improve pupils’ perception of them.
- Careers education and guidance – satisfactory in only 8 out of 10 schools.
- Work experience, to develop pupils awareness of the world of work – about three-quarters of pupils on WRL are well-placed.

Summary from these Earlier Reports

To be successful, WRL requires the following features:

- Be vocationally orientated.
- Knowledge is put to use in real life situations.
- Must exercise and develop skills.
- Pupils must take responsibility for their work.
- Must connect qualifications to WRL.

Extending Work Related Learning at Key Stage 4, 2001

At the time of this survey, students were allowed to discontinue study for 2 courses from science, modern foreign languages and design and technology, and undertake WRL instead. Impact:

- Around one-half increased attendance.
- Around one-third attained higher GCSE grades than predicted for them (although still much less than the national average, this is not surprising, since they were out of school 2 days per week. There is, surprisingly, no central data bank including both GCSEs and NVQs, so we cannot say how many obtain total points scores above that predicted).
- A minority completed a vocational qualification.
- 6 out of 10 continued into full-time education post-16.
- Many improved their communications skills.
- Social skills and self-confidence improved.
- They had a better sense of where they were going and what they would do next.

Key Stage 4: Towards a Flexible Curriculum, 2003

Disapplication has now been liberalised. The curriculum can now be modified for reasons other than WRL, for example, adjust curriculum to reflect strengths.

Current context is that over half of pupils achieve 5+ A*-C grade GCSEs (though often in subjects other than the core subjects of English, maths and science), and 90%

achieve 5+ A*-G grade GCSEs. However, achievement is still uneven, with boys doing less well than girls, and some ethnic minorities doing much worse than the average. Also, only 70% of 16 year olds go on to FE, which is a lower percentage than in many other developed countries.

Problems with attendance and behaviour come to a head at KS4. What can we do about this?:

- Well-constructed alternatives, e.g. vocational education and WRL, are important.
- Provide choice at KS4.
- Reduce excessive variation in quality if what is on offer.
- Alternative provision is being hindered by the narrow range of qualifications provided, by constraints of funding and by inadequate monitoring.
- Alternative providers having to bid for resources deflects time and energy from teaching.
- Many alternative providers operate in an absence of registration and regulation.
- The likelihood of continuing learning is strongly linked to performance at GCSE.

Summary

WRL at KS4 is not a quick fix. It requires a lot of planning, as much as any development at KS4. In particular, it needs:

- Co-ordinated opportunities; links with local industry, careers education and work experience.
- Learning objectives defined in advance.
- Must offer nationally recognised vocational courses leading to qualifications.
- Must use disapplication judiciously maintaining continuity in teaching core subjects and general participation in school life.
- Tutorial support and advice.

Questions from Audience

Is WRL worth all the development suggested in the summary, or alternatively, can we import the flavour of this learning into schools? This would also have the advantage of removing the connotation of exclusion on those who undertake WRL.

- possibly, yes. Should not be seen as an either/or choice of within or outside school. Schools need to work hard to maintain engagement, whilst working with outside providers.

To what extent is a failure to produce cohesion around qualifications important?

- there is some good news here, in that liberalisation has allowed people more access to alternatives. However, some areas are still unavailable for vocational qualifications, and in others there is a lack of progression through qualifications.

There may be confusion about the purpose of WRL. Is the purpose to keep people in school to achieve a qualification (in which case, bringing mentoring etc into schools might work), or is it to provide future employability via methods traditionally outside school i.e. view actual skill acquirement as important?

-Need not be a dichotomy between these 2 goals.

Justin Donovan (Barking and Dagenham LEA) ‘Initiatives in Barking and Dagenham LEA’

Introduction

This is a study of using vocational GCSEs as a way of re-motivating 14-16 year olds. The study is set in Barking and Dagenham (B&D), which is a small LEA, with just 9 secondary schools. The programme of vocational GCSEs adopted is based on a model seen in the Netherlands and Switzerland. All headteachers and participating teachers have spent time in Dutch schools watching what goes on.

Background

B&D is not an inner city area – more accurately described as ‘urban’. The pupils are largely well behaved. Pupils will turn up, although many do not engage when they do. However, B&D is still 24th in the index of deprived boroughs, example of which include very low levels of educational achievement, a low proportion of adults having successfully completed HE, 32000 adults (about one-third of the population) having poor basic skills (reading at the standard of an 11 year old), above average unemployment and many in employment working in low-paid insecure jobs.

Despite this background, OFSTED says B&D has broken the link between socio-economic background and attainment. Has been a huge improvement in KS2 SAT scores between 1995 and 2003. However, many pupils live in homes with no books, and therefore secondary schools do not build on these KS2 results. Has still been a huge rise in GCSE success, helped somewhat by the introduction of vocational GCSEs. There is still a higher proportion of 16-19 year olds NEET than surrounding boroughs.

Examples of Alternative Provision

- Reception and re-integration unit.
- Flexi-learning programme – i.e. tailor made programme for individual students.
- Focus Programme in Barking College.
- Combined school and college programme
- Voluntary sector respite provision
- Vocational GCSEs.

Focus on the latter.

Main Aim

The creation of a vocational pathway at KS4, based on GCSE courses, which benefits from the same clarity, rigour and status as the existing route for academically able pupils.

Lessons from Europe

- Teachers have high expectations – set high standards and pupils aspire to them. This is the most important characteristic.
- Curriculum clearly set out – everyone can see where they are going.
- High quality learning environment
- Clear and rigorous assessments – more rigorous than our A levels and their own academic qualifications (compare that to GNVQ assessments here).
- Support from local and national organisations – help set curriculum, standards etc.

Currently Running Vocational GCSEs

- Engineering.
- Printing
- Construction
- Catering
- Theatre and performance design

Are about 1000 young people involved at one time.

Currently Being Planned or Piloted Vocational GCSEs

- Archaeology – couldn't find a progression route beyond GCSE.
- Sports leadership
- Advanced manufacturing
- Multimedia technology
- Geographical information systems
- ICT support services
- Electronics – difficult to provide, became like applied maths
- Music technology

Key Characteristics

- Based on the curriculum in the Netherlands and the teaching of the Swiss.
- Courses written in collaboration with industry bodies. Companies help with assessment (for example, checking whether work is of industrial standard).
- Setting industrial standards is important, so that students are not out of place when they go out on placement.
- Focus on practical experience rather than theory, though GCSE criteria have to be met.
- Courses designed to develop personal attributes, e.g. skills that can be used whatever the student's career (rather than specific skills for particular jobs).
- Additional accreditation.

Developing the Vocational GCSEs

Three approaches:

1. Produce from scratch.
2. Use of modular GCSE course.
3. Adapt GCSEs, e.g. start with assessment criteria and work backwards, so that students end up sitting the same exam as the rest of the country, but have different methods of getting there.

Positive Outcomes

- Increased motivation and reduced poor behaviour.
- Attendance and punctuality increased. One problem remaining is that a minority only turn up for their vocational GCSEs. Therefore trying to link vocational GCSEs to core courses to avoid this (e.g. engineering with maths).
- Higher post-16 staying on rate – not necessarily one's who would have stayed on anyway.
- Some pupils achieving well for the first time, and success can be addictive.

- Higher completion rates at KS4. Therefore even if the students are truanting the rest of the week, at least they are still on the school role and still have some contact with the system.
- Development of self-confidence and other key personal attributes making students more employable.
- Positive impact on quality of teaching, e.g. through foreign visits.
- Good exam results, in what are difficult GCSEs to get.

Key Lessons Learnt

- Worried about career guidance in Year 9, since some students do not seem to know what they have entered for on vocational GCSE courses.
- Structural links with other GCSEs difficult to develop. Students are supposed to drop an optional course, and received extra maths and English appropriate for their vocational GCSE, but this has proved difficult, e.g. English teachers adapting and providing the required information.
- Placements should be over and above work experience, e.g. if going to be a plumber, don't send them only into plumbing firms. However, this would impart on other GCSEs.
- Need to genuinely adopt real industrial practice and standards, otherwise students not taken seriously by employers when sent out.
- Need to maintain a broad curriculum at KS4 with progression routes to post-16 (all B&D vocational GCSEs now do this).
- Double option blocks militate against the academically able taking practical courses, if they have to drop 2 academic subjects.
- There is a clear advantage to having the relevant industry on the school's doorstep, if going to be serious about having industrial standards (would be a problem in e.g. Cornwall, but B&D well-placed). Don't want simulated work experience.
- Recruiting, training and retaining suitably qualified and experienced staff is crucial. Cannot recruit industrialists via licensed teacher routes now. This fragile underlying teacher base is a problem. If a teacher is lost it can be difficult to get hold of another teacher with the relevant vocational knowledge.

- Vocational GCSEs should not simply be used to place difficult students. This is not what they are designed for. On a visit, Patricia Hodge queried why a gifted student was doing a vocational GCSE in theatre design. Therefore need to persuade people that entry to vocational GCSEs is not about ability.
- Very expensive - £5000-£50000 start up costs per course per school, and up to £1000 annual maintenance costs per course per school. The main sources of funding are SRB, LEA (out of the LEA block, cutting resources for other areas), the DfES and the schools themselves.

Questions from the Audience

Why have the vocational GCSEs in schools, rather than sending the students off to colleges, which presumably have more resources for vocational teaching?

- by having the courses in school, they have an immediate impact on KS3 students, who see their KS4 elders doing these exciting courses. Also, don't have to rely on a single college, which could, for example, increase its fees or not make best workshops available. Finally, it would identify the students as a separate population if they were going out to college.

Could we follow, e.g. Norway and Denmark in making general subjects relevant to vocational courses? These countries develop separate textbooks, e.g. maths for carpentry, maths for engineering etc.

- the problem is finding available teachers, rather than a shortage of teaching materials. Industrialists obviously know the industrial background, but do not know, e.g. the further maths, while proper maths teachers are not interested in maths for carpentry.

How have parents responded?

- they are fascinated and supportive when students are making their choice of courses, but after that their interest wanes. There is, for example, no impact on attendance at parents' evening.

Can students change track post-16 (e.g. printing to design), or opt onto a post-16 vocational course with no vocational qualification pre-16?

- yes, there is a lot of movement, and students need not worry being pigeon-holed into particular areas by vocational GCSEs. Pre-16 construction seems to lead to post-16 construction, but this is not true in other areas.

How have you got employers interested?

- employers see that they get their money back when the students go in on placement and have been well –trained. Firms can see that they are having an impact. Theatre companies just seem to enjoy it.

Has there been any role for trade unions?

- no, there has been no engagement with unions.

Is there any sign that the government will encourage this scheme in other boroughs?

- no, and is unlikely. Given that so much has been invested into GNVQs, vocational education will continue to look like GNVQs. B&D remain convinced that single-subject blocks is the way to go, while the vocational GCSEs being proposed nationally are 2 option blocks. If these are to be adopted, we need to consider other ways of fitting them in, e.g. starting GCSEs early (year 9), and teaching in evenings or Saturdays.

Given the scarcity of vocational teaching staff, what would happen if the scheme was rolled out nationally?

- yes this would be a problem, although note that teachers are now quite well paid relative to industrialists.

What are the actual costs (not mentioned e.g. travel costs or training teachers costs)?

- Don't know actual total costs. Note it would be cheaper to implement in newer, specially designed schools.

Do students reach FE college and find that they already know everything?

-No. The colleges have been very good at acquainting themselves with B&D's vocational GCSEs and putting students on appropriate courses.

We need large firms to support this scheme. Courses may be lost because firms are downsizing. Would an audit of what we are capable of offering in terms of vocational education be useful?

- Would probably find that an audit of schools reveals that they are still quite well equipped, although many scrapped equipment when vocational education went out of fashion.