

# The Effect of TVEI on Curriculum Development

Part of the philosophy of TVEI is directed towards increasing the pace of curriculum development. In the past, this development was the responsibility of individual schools influenced by LEA policy and HMI and DES suggestions. However, the ability to influence curriculum development has now been extended to include the MSC through the power it derives from its financial resources and Government backing.

The MSC's influence is exerted partly through LEAs, because of its financial input, and partly through its involvement with the Project Steering Committees (PSC) which are responsible for the oversight of TVEI including the nature and relevance of the curriculum the pupils pursue. The MSC has only one representative on each PSC, acting apparently in an advisory role to ensure that any recommendations made by the PSC are consistent with aims of TVEI. However, during the first year of the pilot scheme, MSC has appointed its own advisors, drawn from the secondary and further education sectors of education, who are each responsible for a number of TVEI schemes. Part of their function is to look at the contract agreed between each authority and the MSC, look at the curriculum implications of each scheme, and assess how successfully an authority is meeting its part of the contract and the aims of TVEI.

The aims of TVEI, shown in Appendix A, reflect an optimism for future employment prospects, for TVEI students at least. They stress the need to construct a bridge from education to work and to better equip pupils '... to enter the world of employment which will await them', probably as part of an overall policy to encourage positive attitudes towards TVEI (and YTS). The emphasis is undoubtedly on skills and vocational training: a fact which Lord Young emphasised when he stated 'All schemes are generated to develop skills and interests ... that will help young people for tomorrow's world in their working lives (MSC, 1983). Although in a statement made almost a year later he appeared to move away from this 'vocational' standpoint towards a more educational one, when he declared that TVEI aimed to motivate pupils when they would otherwise be bored with school and that 'TVEI was intended to broaden the curriculum and not to make technical schools' (Garner, 1984), this may have been part of an attempt to project TVEI; to encourage more authorities to consider adopting it; or perhaps an adaptation of his ideas in the light of pupils' initial positive response to the scheme.

The CBI however still wants 'vocationally-relevant courses' (Jackson, 1984a), and appears convinced that the actual number of highly skilled and qualified people in manufacturing will increase. This view is somewhat at odds with that of American industry which expects most new jobs to be created in traditional manufacturing and service industries and would prefer school leavers with a good command of English language and mathematics (David, 1984) to those with vocational

skills. The growth of the service industries in the UK appears to support the American view but which ever course turns out to be the correct one, neither country appears to know what will be best for the less able pupil. Certainly TVEI documents avoid mentioning that there may not be 'a bridge from education to work' for many pupils. During the first year of the schemes however TVEI appears to have been well received by pupils and teachers and, according to the Project Co-ordinators of Clwyd and Hereford and Worcester, there are signs of increased curriculum development in TVEI schools. For example, TVEI schools in Hereford and Worcester are now thought to be defining curriculum objectives in more precise terms and looking more closely at styles of learning. What emerges from conversation with both co-ordinators is that pupil pressure may be a major force in persuading schools and individual teachers to reconsider their objectives and teaching methods. This assumption is based on the observation that pupils experience of TVEI's more experiential learning methods makes them critical of didactic teaching methods. This is probably true: but pupils (and parents) have exhibited an ability to influence teaching methods prior to the introduction of TVEI. The demand for computer education, for example, was evident before TVEI existed, and option choices in secondary schools have for many years allowed pupils to 'vote with their feet' which in some instances has forced teachers to alter the presentation of their subject material in order to attract pupils.

It might be considered unfair to be over-critical of teaching methods because the subject content for most 14+ courses in secondary schools is dictated by examination boards. On the other hand, teaching style and methodology can improve the presentation of any subject. But it does look as if pupil reaction of TVEI courses may help to speed up the process of such curriculum development. Consequently, heads of department in TVEI schools may be able to take advantage of this phenomenon in order to initiate development in their subject area — and across subjects.

Little research has been undertaken which has examined the reactions of students to innovations (but see Hull and Rudduck, 1980); but Fullan (1982) suggests four patterns of student response to change: indifference, confusion, temporary escape from boredom (cf. David Young's comment on TVEI counteracting boredom), or heightened interest and satisfaction with school. It is this fourth pattern of response which TVEI appears to be producing at present — a response which may indeed lead to pupil pressure for curriculum development. For example, one of Clwyd's TVEI schools has experienced such a demand for TVEI options that no conventional academic route was offered for the 200 plus 1984 pupil option group, yet no objection appears to have been raised by parents or pupils. The popularity of TVEI courses

in this instance may have a direct link with improved facilities and psychological phenomena (for example, experiencing a new way of working, expectations of others and being the focus of attention).

Thinking a little more deeply about the Hawthorne Effect (see Handy, 1979) in relation to the apparently enthusiastic acceptance of TVEI by pupils in particular, a number of questions come to mind;

1. How much is TVEI's success to date a result of pupils appreciating and responding to the 'novelty' of its courses?
2. Are pupils better motivated because the aims of the new courses (and perhaps the enthusiasm of the teachers) have been clearly communicated to them as a means of 'selling' TVEI in the first instance? i.e. is it because they have been involved more in considering the meaning and purpose of such courses than would normally be the case with traditional courses?
3. Have the TVEI courses resulted in a changed relationship between pupils and teachers? and, if so, can it be utilised to advantage?
4. How long can the Hawthorne effect be expected to continue?

These questions can only be answered in the course of time but it is possible to speculate. For example, the novelty value of TVEI must fade eventually if it becomes an accepted part of 14-18 education. The only way it could be retained would be to ensure that pre-14 education remains 'traditional' which will be unlikely whether TVEI proves successful or not.

As to the influence of communications and understanding the aims of new courses, how much is due to teachers having to clearly think through the TVEI courses and make them interesting in order to sell them? At the moment pupils appear to have opted for TVEI because they see it as a possible route to employment because of its modern technology and vocational bias. But marketing or selling the courses could become more important in the future due to competition not only between subjects but also between schools, F.E. and other post-16 options which already offer vocational and technological bias.

A possible change in the relationship between pupils and teachers is a fascinating prospect which could greatly affect educational thinking. If the evidence, from both Clwyd and Hereford and Worcester, that pupils are in effect becoming agents of change because their expectations of lesson content increases after TVEI experience, is true, then it may be that pupil pressure can 'drive' change and result in more realistic teaching methods. A change in teaching methods resulting in more experiential learning and greater participation between teachers and pupils may become an important outcome of the TVEI project as a whole. As Rutter *et al* (1979) point out, one consistent finding from research is that 'shared activities towards a common goal which require people to

work together are a most effective means of reducing inter-group conflicts'. This should lead to a happier working environment for many pupils and a more effective one for teachers.

The question of how long the Hawthorne effect can be expected to continue will probably depend on a number of factors:

- (a) Whether the schemes continue in their present, somewhat devisive, form or are absorbed into the normal curriculum;
- (b) How long TVEI courses remain the focus of attention;
- (c) Perhaps most importantly, whether or not the necessary resources can be financed to expand the schemes, and allow existing schemes to keep pace with technological developments.

If the Hawthorne effect does prove applicable to TVEI it is worth pointing out that the motivation and work output of the group of workers who were the focus of the original Hawthorne Studies continued to rise '... until it established itself on a high plateau from which there was no descent until the time of discouragement and deepening economic depression which preceded the end of the test in 1933' (Owens, 1981). In which case it could be argued that the continued influence of TVEI on curriculum development and educational thinking will depend more on financial support and adequate resources than any other factor. Indeed, it is already apparent in Clwyd that the pace of TVEI development in the schools which will form the second and third waves of the introduction of TVEI throughout the authority, will be less than in the first wave of schools, due to the decreasing funding available for specialist resources in each successive wave. How much the effect of this can be offset by the use of facilities at Bodelwydden TVEI centre, or by utilising the experience gained by the original pilot scheme schools, awaits to be seen, but it seems likely that finance will be as much a key to TVEI's continued impact on the curriculum as it was to its critical acceptance.

#### **Reservations about TVEI**

The philosophy behind TVEI has been debated at some length during the first year of the original fourteen pilot schemes, and many authorities have expressed concern about the effect of TVEI on the principles of comprehensive education. For example particular concern has been exhibited in some quarters that TVEI could be devisive and create an elite group within schools. That there are difficulties in this area cannot be denied particularly when TVEI pupils are seen to be enjoying extra resources and receiving special treatment such as visits to TVEI centres.

The problem in individual schools appears to centre on how easily TVEI pupils can be identified. However, as all pupils are involved in core subjects, such as English and Maths as well as TVEI subjects, this will probably decrease as TVEI becomes an accepted part of the curriculum — particularly if the blanket title of TVEI can be

dropped as the subjects which it represents become more familiar to schools, e.g. control technology, information technology and word processing; or perhaps new titles will be developed based on the occupational families shown in Appendix B (these 'families' are little understood at present but they form a key part in categorising the various technical and vocational 'subjects' of the different TVEI schemes and also the job opportunities available to school leavers).

The divisive aspect of TVEI is probably more apparent when pupils are transported regularly to TVEI centres, such as happens in Hereford and Worcesters' schemes, when pupils can be identified by both their regular absence and their comments when they return. But the greatest divide at present is probably between TVEI schools and non-TVEI schools. There are indications that improved provision for TVEI schools is resented by non-TVEI schools and all schools may, to some extent, resent the lavish resources of TVEI centres.

Certain associations have advocated positive discrimination in funding non-TVEI schools. Teachers have been moved to write to the TES on such matters as the additional careers advice provided in TVEI schools when other schools in the same authority have none, and headteachers have commented that TVEI equipment encourages pupils to opt for subjects for the wrong reasons because TVEI allocates resources to relatively small numbers of schools pupil teachers and curriculum areas (Baker, 1984). Another reservation mooted is that TVEI may prove too successful: increasing job prospects for TVEI pupils but making employment less likely for non-TVEI pupils.

One cannot disguise the fact that the first schools to participate in TVEI have, in many instances, benefited greatly through their LEAs from MSC money. It is also apparent that the longer a school is delayed from participating in TVEI the less it can expect in the way of improved resources. However, it should perhaps be remembered that the original intention behind the MSC's generous initial funding was to trigger an interest in, and an awareness of, what technology can offer schools. That this was likely to lead to criticism related to perceived preferential treatment for selected schools must have been foreseen and accepted, but it is a problem that will take some time to resolve — even if extra funding is provided at a later date — because the expansion of technology in schools, whether it be an MSC initiative or a school initiative, will lead to fierce competition for staff. As Mr Keith Evans (then Deputy Director and now Director of Education for Clwyd) has pointed out, '... to run the new kinds of courses properly means recruiting staff with skills which are in short supply generally' (Jackson, 1984).

One obvious solution is to train new teachers in the skills required but, as technology is an area in which such rapid progress is being made, it may be better to develop INSET courses for teachers with an interest in technology. This would have the

added advantage of increasing the opportunities for staff development at a time when job opportunities are somewhat restricted, and may also reduce the suspicion of new technology that is felt in some subject areas because colleagues returning from courses will not appear as threatening as new comers to a school.

#### **TVEI influence on Curriculum Development: further considerations**

One can see that the immediate need to timetable TVEI subjects, either as options in schools or release elements for TVEI Centre work, will cause disruption to an existing curriculum. It has often been easier in the past to introduce new subjects into schools on an 'as well as' rather than an 'instead of' basis but the simultaneous introduction of a number of subjects, block release and increased counselling must force a review of any school's curriculum. Four general scenarios for future development come to mind:

1. The adoption of TVEI as a technical stream with an academic stream and a low achievers' stream.
2. A common core of subjects plus a wide range of options including TVEI subjects or modules.
3. A wider common core which would include some elements of TVEI plus a small range of options.
4. School consortias which would provide the widest possible range of options in combination with each individual school's curriculum.

Financial support will ensure that TVEI subjects do find a place in the curriculum (cf. Nuffield Science) but once absorbed into the curriculum their continued existence will depend on:

- (a) continued funding
- (b) the interest of pupils
- (c) the enthusiasm of teachers

Schools have long continued with an academic curriculum because good exam results have secured good jobs or higher education for school leavers. The idea of qualifications leading to jobs has long been a fallacy. Most jobs for sixteen year olds are decided on the basis of confidential school reports before examination results are known. Even for careers which demand specific entry qualifications, five or six 'O' levels or equivalents are adequate for almost any pupil. Certainly this number is sufficient when combined with any 'A' level requirements. The problem will be deciding on the subjects to exclude from any revised curriculum. It is the tension arising from this problem which will cause the biggest headache for managers whichever scenario is adopted.

Teachers will agree that new technologies need to be taught but they will long argue the value of any threatened subject. Agreement on specific curriculum development is therefore likely to be the major management problem for schools and will inevitably be linked with the management of change.

## Appendix A

### AIMS OF THE NEW TECHNICAL AND VOCATIONAL EDUCATION INITIATIVE

A. *In conjunction with LEAs* to explore and test ways of organising and managing the education of 14-18 year-old young people across the ability range so that:

1. more of them are attracted to seek the qualifications/skills which will be of direct value to them at work, and more of them achieve these qualifications and skills;
2. they are better equipped to enter the world of employment which will await them;
3. they acquire a more direct appreciation of the practical applications of these qualifications for which they are working;
4. they become accustomed to using their skills and knowledge to solve the real-world problems they will meet at work;
5. more emphasis is placed on developing initiative, motivation and enterprise as well as problem-solving skills and other aspects of personal development;
6. the construction of the bridge from education to work is begun earlier by giving these young people the opportunity to have direct contact and training/planned work experience with a number of local employers in the relevant specialisms;
7. there is close collaboration between local education authorities and industry/commerce/public services etc. so that the curriculum has industry's confidence.

B. To undertake A in such a way that:

1. the detailed aims can be achieved quickly and cost effectively;
2. the educational lessons learned can be readily applied in other localities and to other groups among the 14-18 year olds;
3. the educational structures/schemes established to further the aims of the initiative should be consistent with progressive developments in skill and vocational training outside the school environment, existing vocational education for under 16-year old people, and higher education;
4. emphasis is placed on careful monitoring and evaluation;
5. individual projects are managed at local level;
6. the overall conduct, assessment, an development of the initiative can be assessed and monitored by the MSC and the NTVEI Unit it has established for this purpose.

## Appendix B

### OCCUPATIONAL FAMILIES AND THEIR 'KEY PURPOSES

Occupation	Key Purpose
1 Administrative, Clerical and Office Services	Information processing
2 Agriculture, Horticultural, Forestry and Fisheries	Nurturing and gathering living resources
3 Craft design	Creating single or small numbers of objects using hand or power tools
4 Installation, maintenance and repair	Applying known procedures to making equipment work
5 Technical and scientific	Applying known principles to making things work or usable
6 Manufacturing and assembly	Transforming metallic and non-metallic materials through shaping, constructing and assembling into products
7 processing	Intervening into the working of machines when necessary
8 Food preparation	Transform and handle edible matter
9 Personal service and sales	Satisfying the needs of individual customers
10 Community and health services	Meeting socially defined needs of the community
11 Transport services	Moving goods and people

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