

What makes a programme vocational? School-based work-related programmes in Canada

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Abstract

The paper addresses the vocational aspects of the curriculum of five work-related programmes of a school board in Canada. The fieldwork on which this paper is based was carried out in autumn 2009 and involved a qualitative case-study investigation of the vocational dimensions of the learner experience on these courses which were located in different secondary schools.

Central to the paper is a consideration of the work-related learning embodied within the activities and assessment tasks on these upper secondary school programmes. Of particular interest were the curriculum activities, pedagogy and assessment tasks and the views of teaching and support staff, as well as student views and dispositions, for example their learning and career aspirations and their attitudes towards their programme. The paper will argue that a key influence on the vocational dimension of the courses is the background and experience of the teachers.

The paper presents vignettes of each of the case study courses and discusses the extent and ways in which employers were involved in and engaged with each programme using a framework that has been developed for exploring the vocational dimensions of school-based work-related courses.

Keywords: vocational; work-related; employers; secondary curriculum; Canada

Introduction

The label 'vocational' is applied to many courses and qualifications that can be taken as part of full-time compulsory education, though both the purpose and nature of these courses can vary considerably. There is also a wide range of school courses to which the term vocational is not applied but which nonetheless have a clear focus on preparing young people for working life.

The purpose of this article is to consider in greater depth the different dimensions that contribute to the vocational nature of upper secondary school courses whose primary purpose is preparation for work or further work-related training. This will be pursued through an exploration of the vocational aspects of the curriculum of a selection of the work-related programmes of a school board in Canada. At the heart of the paper is the presentation of a framework designed to elucidate various vocational dimensions together with vignettes of five in-depth case studies, which are then discussed in terms of the framework. A central finding of the paper is that the background and experience of the teachers is a key influence on the vocational nature of the courses.

Vocational education

Clear definitions of the meaning of the label 'vocational' when applied to a school-level qualification or course are few and far between in academic writing, in public discussions and policy proposals as well as in qualification specifications. All too often it is assumed that the term is universally understood as relating to preparation for work, with little further need to elucidate. Where vocational education is defined in the school context, this can vary from a broad, generalist view of work-related learning:

planned activity designed to use the context of work to develop knowledge, skills and understanding useful in work, including learning through the experience of work, learning about work and working practices and learning the skills for work. (Her Majesty's Government 2006, section 74.1)

to the more restricted and occupationally-specific interpretation for vocational education proffered by the Canadian Teachers Federation (CTF) where it is:

specifically directed toward the teaching of skills and knowledge which are useful in occupations for which post-secondary education is not required and which may help graduating students qualify for entry-level positions in those occupations" (CTF 1987, 5).

The substantive differences between these two definitions highlight the variability of the interpretations and point to the long-standing contestation regarding the concept of 'vocationalism' and its many purposes and forms (see for example: Chitty 1991; Pring 1995; Pring et al. 2009; Winch, Hodgson and Spours 2008).

Versions of vocationalism, to borrow Bates' phrase (Bates 1989), might be said to form a continuum from weaker conceptions, sometimes termed pre-vocational, which emphasise the understanding and skills needed by young people in their future adult and working life, or general preparation for work with a focus on understanding, generic skills and attitudes relating to flexibility and employability, via exploration of or preparation for entry to a family of occupations or broad occupational area, through to stronger expressions focusing on the development of occupationally-specific technical skills and preparation for the requirements of direct entry to a given occupation.

While this spectrum does have appeal in the potential it seems to offer for situating a given course along its line, such an approach does obscure, if not deny, the possibility that the prescribed curriculum of a qualification may well seek to combine elements of different conceptions of vocationalism and indeed that the curriculum enactment in courses leading to this qualification may well successfully draw upon and integrate a range of approaches. The same pitfalls apply to the distinction drawn between 'new vocationalism' and 'old vocationalism' (Hodkinson 1991; Bates et al. 1998; Avis 2004) which although of considerable value in policy analysis, not least in capturing a shift in emphasis and content of 'vocational' course for young people loses its edge when applied to the realisation of individual courses, implying an overly sharp differentiation.

While the extent to which a course is vocational might ultimately be a conceptual or even theoretical question, I would argue that conceptions of vocational education have shifted over time and place and therefore some sort of universal, stipulative definition is neither feasible nor desirable and that what is needed are careful descriptions and analysis of practice in different settings. Nonetheless to undertake the fieldwork reported here required a working definition of vocational education both to assist with the selection of the courses to study and to guide the focus of the research. The conception adopted was towards the stronger end of the vocational spectrum but a broadly cast one, namely where the primary purpose of a course is to prepare young people for entry to a specific occupation or a set of related occupations, either directly or via further training or study. The nature of this preparation does not form part of the definition and is seen as a matter for investigation via fieldwork to explore the combination of work-related activities and experiences engaged in by students on a particular course and the ways in which these interact.

In addition to a wide range of international policy analyses and surveys (see for example: Hayward 2007; Iannelli and Raffe 2007; Moodie 2001; Polesel 2008; Rauner 2009), there has been a number of empirical studies on vocational programmes for young people in full-time education, some evaluating an qualification (e.g. Hodgson and Spours 2010) or an initiative (e.g. Higham and Yeomans 2008), others focussing on a dimension such as gender and class (e.g. Colley et al. 2003) or on student orientations and pedagogy (e.g. Bloomer 1997), or a particular subject such as Physical Education (e.g. Brown and Macdonald 2001), and Crump (2005) has specifically sought to consider the vocational approach of a school.

Within the Canadian context, Smaller (2000) presents an historical overview of vocational courses in upper secondary schools in Ontario and Lehmann and Taylor discuss educational policy on school-to-work initiatives in Alberta highlighting the continuing emphasis on both 'employer expectations and workplace socialisation' (Lehman and Taylor 2003, 45). Taylor (2010) further presents a critique of Canadian educational policy regarding high school apprenticeship programmes and a number of empirical studies have been undertaken specifically on school to work transition programmes (DeLuca 2010; Chin, Munby and Hutchinson 2000; Smith and Hill 2005; Zanibbi 2007). As with the other research highlighted above, these studies focus on particular aspects of the work-based curriculum: student motivation; disengaged young people; work-place learning; the development of enterprise skills.

Only a very few recent empirical studies have taken a qualitative, case study approach to investigate in a holistic way the vocational flavour or culture of a school-based course. Yates (2006) looked at two dual accreditation courses, Information Technology and Hospitality Operations, in a Australian high school in New South Wales. Although based in a single school, the study served to highlight the importance of local context, the centrality of assessment, teacher background and student orientation to the vocational area. Taylor and Watt-Malcolm (2007) researched the carpentry strand of the Ontario Youth Apprenticeship Program across two school boards. Their findings point to a restricted approach to learning across the three sites of the course:

school, training provider and work-place, and underline the difficulties associated with the provision of 'expansive' learning opportunities (Fuller and Unwin 2003).

The present study seeks to build on these earlier empirical studies by using an analytical framework to explore the vocational dimensions of five case study courses provided by different schools one school board to seek to elucidate what it is that makes a course vocational.

Methodological approach to the study

The empirical phase of this independent, unfunded study was carried out in autumn 2009 and as indicated above involved an investigation of the vocational dimensions of the learner experience in five work-related courses located in different secondary schools in a Canadian school board. It included three days case study fieldwork per programme spread across the semester, using a range of methodologies involving observation of school and work-place activities, individual interviews with key administrative, teaching and support staff as well as employers, and documentary analysis. During the course of the fieldwork visits opportunity was taken to discuss with each student present their motivation for and experience of the relevant programme. This involved formal interviews or informal discussions with some 70 students, often on two or three separate occasions.

Participation in the study by schools, staff, students and external partners was voluntary. All prospective participants were given outline information and a consent form about the project and its aims and were assured of anonymity and of their right to withdraw whenever they wished. In the event, none declined or withdrew although one student made a specific request not to be interviewed.

Vocational framework for data collection and analysis

The analytical framework developed to explore the vocational aspects of the courses was based on previous empirical work undertaken in relation to various vocational qualifications, courses and curriculum initiatives over a number of years (see for example: Higham 2003; Higham and Yeomans 2006, 2007, 2009, 2010). This work led to an emerging understanding of the different factors contributing to the overall nature and strength of vocationalism in a course. The framework covered seven key dimensions as outlined below:

A. Institutional Context

This component of the framework is concerned with the type of institutions in which the vocational provision is offered including any specialist focus. It extends beyond structural institutional characteristics to include culture and ethos. It also encompasses the location (both physical and symbolic) of institutions within localities.

B. Purpose and Aims of the Course

This includes the formal stated aims of the courses or interventions and judgements about their vocational specificity. It draws attention to state justifications in promoting and funding the provision and institutional imperatives in offering it. At national and local levels it is concerned with both potential and actual progression routes to training or work.

C. Student Recruitment

This concerns the extent to which a vocational course or intervention is targeted at particular student groups and how far there are explicit or implicit entry requirements based upon prior achievements, experiences and/or dispositions. Attention is focused upon the ways in which the provision is labelled and marketed for learners and the formal and informal processes of information, advice and guidance which are planned and enacted. This component also addresses student expectations and future plans regarding training and work.

D. Resources and Staffing

This component addresses whether there are industry standard specialist facilities and resources. It also prompts examination of the extent and role of employers in providing facilities, materials, resources and expertise. On staffing it raises questions about the vocational experience and backgrounds of the staff teams, the role of non-qualified teachers and the processes for updating staff knowledge and skills.

E. Curriculum

Both the planned and the enacted curriculum are of interest. In the case of the former there is emphasis upon the planning process and the roles of different stakeholders within this, perhaps especially employers. This component also directs attention to the respective roles of theory and practice within the curriculum and the extent to which these are integrated. The role of generic vocational or work-related skills is addressed. In relation to the enacted curriculum the *roles* of different participants e.g. teachers, other staff, students, employers and the *sites* at which it is enacted e.g. school classroom, college workshop, employer workplace are considered.

F. Pedagogy

The focus here is on the overall pedagogical philosophy and approach as this is both promoted and practised. This entails a particular emphasis on the kinds of tasks which are undertaken, including whether they are work-based, actual industry problems, simulations or simply given a vocational context. This part of the framework also directs attention to the ways in which any underpinning theory is taught as well as generic skills.

G. Assessment

The focus here is upon the forms of assessment which are deployed, the balance of formative and summative assessment, the use of external assessment, for example by employers, and the success criteria which are applied and the provenance of these criteria.

Overall context of the work-related programmes

Before turning to a consideration of each of the case study courses, it is first important to set these programmes in their context and give an overview of the purpose and nature of the school board's provision in this area.

The five work-related learning programmes selected for case study fieldwork formed part of a wider provision of multi-credit programmes. This collaborative provision included both academic and vocational programmes and students from any school could follow any programme within the board. This related to the policy of providing a diverse range of pathways to respond to students' needs and interests. The credits available on the programmes were either situated at a hierarchy of levels relating to expected progression routes: University/College, College or Workplace. They could also be Open credits with no specific level assigned.

Those courses that were work-related covered a range of occupations or vocational sectors such as car maintenance, construction, law and order, carpentry, hair and beauty, the arts, information technology and catering. In my own country, England, such provision is very often provided in a further education college from age 16 (see for example: Clarke and Winch 2007), though post-16 school-based vocational programmes do exist (see Higham and Yeomans 2009). In Canada however, as in many countries of the developed world, the college system does not provide an alternative to secondary school education, making provision only for those aged 18 and above. Thus curricular diversification to meet young people's learning and career oriented interests through vocational education necessarily takes place within a school context.

The programmes within this overall collaborative provision shared a number of characteristics. As indicated above they were integrated programmes, covering three or four credits and included optional credits, often from related areas of the school curriculum. In particular, the more vocationally-oriented programmes would typically incorporate one or two credits for cooperative education. This cooperative education had a strong experiential or practical component taking place in the local community and sometimes took the form of supervised work placements on employer premises. The courses would thus comprise most, if not all, of the weekly timetable of a student throughout the semester and typically had a single teacher.

Five work-related programmes were selected for in-depth study to cover a range of programme types, curricular contexts and sites. The following sectors were covered: construction, communications, transport and manufacturing and we now turn to a consideration of each of these courses before discussing an overview of the vocational dimensions using the framework for analysis.

Case studies overviews

1. Millwrighting at Aspinall High School

This manufacturing course was marketed in recruitment publicity as 'apprenticeship preparation for millwrights, machinists and welders'. It covered two credits of Manufacturing Technology and one credit of Design Technology, with students needing to attend separate classes to gain English and Mathematics credits. The course covered the first semester, and provision was made for an optional linked work-placement in the second semester. This work-placement needed to be in the occupational area of millwrighting or welding to enable students to meet the requirements of the province's Young Apprenticeship programme as well as the Specialist Skills Diploma which nearly all students were following.

The course tutor was Andy Ashton, a former millwright who had extensive experience of the industry. He taught the course in a large machine workshop in Aspinall School with a wide range of machining, milling, grinding and welding equipment, much of which was industry standard. With few exceptions, the students were committed to either millwrighting or welding as a career. All spoke highly of the course which was just what they had been expecting. They were highly motivated and during the sessions observed seemed mature, self-starting and focussed on their individual or group projects.

These projects and the associated assessment were at the centre of the course which was based on the curriculum expectations or learning outcomes of the apprenticeship curriculum but with careful alignment and supplement to ensure that the Technology specifications were met. The projects tended to be individual ones either common to all students and covering a range of machining, millwrighting and welding skills or related to a student's own personal or leisure

interests. Andy would sometimes accept a major commission from an individual or a community partner resulting in a substantial group project that focused on the manufacturing of a product. In this latter case, the decision as to whether to accept the commission related to the range of manufacturing skills required.

The projects were not primarily designed as realistic or authentic occupational tasks but rather the emphasis of the course was on technical skill development and the purpose of the projects was to develop and assess these skills. For the commissioned projects, the emphasis was on the manufacturing of a high quality product in a given time-scale rather than on engagement with the customer regarding product design and costing. While this lack of design and problem-solving might be seen to represent a lack of vocational emphasis, it reflected the philosophy underpinning this pre-apprenticeship course, namely that high levels of technical skill were of central importance for employment in the industry:

when they leave here with those extra skills and knowledge, they become a better employee, they become a valuable asset to somebody's business, and they're more saleable. I think that's important to send kids out with as much skill as we can give them, real skills that we can give them so that they're employable. (Andy Ashton, course tutor)

The main mode of teaching was thus through project work and Andy would oversee the students as they worked, coaching them individually, demonstrating new skills and assisting them to hone a particular technique. This practice replicated that of the way he used to work with apprentices in the millwrighting industry.

2. Motor Vehicle Maintenance at Baxendale High School

Recruitment publicity for the motor vehicle course at Baxendale High School foregrounded an orientation 'towards future employment in the automotive transportation industry'. This semester one course constituted the entire timetable for students and covered two Transportation Technology credits, one work placement credit as well as a Mathematics credit. The course formed part of the province's Young Apprenticeship programme and work placements were integral to the course which was organised in four four-week blocks. The first block was school-based work in a car maintenance workshop followed by a four week work placement in a local car workshop or dealership. A second period of four weeks back in the school workshop was followed by a final four weeks of work experience.

The course was taught by an experienced car mechanic, Brian Boardman, in a school workshop with a full range of equipment and facilities comparable with a small independent garage. While the workshop had an area set out with desks where occasional plenary sessions took place, the main mode of learning was a practical one through working on cars, typically those of teachers within the school or from contacts in the local community. As with the millwrighting course, no fee was charged though the 'customers' would often make a small voluntary donation to the course funds to enable replacement of equipment. The curriculum was thus essentially a practical one with a strong emphasis on authentic tasks. Students would work individually or in small groups on specific jobs with Brian working alongside them and coaching them much as he would when he worked with apprentices or other teams in the automotive industry. In terms of assessment the realities of the trade were central to the context of the genuine tasks upon which the students were formally assessed.

As indicated above the work placements were integral to the course. Students had to find their own placement in local workshops with the first block of four weeks spent preparing students

for the placement in terms of the basic technical skills required, health and safety, employer expectations and the culture of the workplace which Brian modelled with his students in the school workshop.

Kids who know me, know who I am: 'I'm not going to tell you it's like this here and then have you go out on co-op and be like: 'Wow. This is really surprising!' I want them to go out on co-op and be like: 'This is way less stressed out than the shop is at school'. I'm not here to stress them out but I'm not here to coddle them through the course either. (Brian Boardman, course tutor)

Nearly all of his 20 students had a strong commitment to being an automotive mechanic and knew what they were getting into. Some had family in the industry but all were clear that this occupationally-specific course with a strong vocational orientation was what they wanted, even two who were not yet sure about taking up car maintenance as a career.

3. House Renovation at Crestland High School

The principal aim of this programme was advertised to prospective course participants as 'to assist students in gaining the skills necessary to become productive members of the construction industry'. The semester-long programme covered Construction Technology and work placement credits plus English and Mathematics. It involved students working on a series of renovation projects on houses in the local community. The projects were formal contracts between the school and the householder who would cover material costs and have the option of making a voluntary donation to the course funds. All aspects of the work were subject to building codes of practices and inspection and the provision of a high-quality product for the customer was central to the course.

The renovation contracts ranged from small-scale projects limited to one room of a house to the full-scale renovation of large houses, which was seen as the ideal as it provided enough varied and sustained work for the whole group of students. Students would spend the entire semester working on one or more of these residential projects following an initial three-week preparatory block of teaching based at Crestland High School. The more theoretical components for the Construction Technology, English and Mathematics elements would typically take place in blocks between working on contracts, otherwise they were fully integrated into the work on the jobsite. The course could lead to the Specialist Skills Diploma and formed part of the Young Apprenticeship programme.

The renovation contracts were very varied in nature and this gave the 15 students in the group opportunity to explore potential career pathways in terms of their particular skills and interests, from framing to roofing, from plaster boarding to bathroom installation, including those trades where a sub-trade specialist had to be brought in. Here the sole teacher, Chris Cooper, a former carpenter, was keen to give students valuable experience of observing and assisting sub-contractors such as plumbers or electricians to widen their perspective and understanding of the different trades:

I have to prep the contractor. So, in other words, if he's a grumpy fellow and doesn't want students next to him and doesn't want to be asked questions, which can happen sometimes, somebody who's not supportive necessarily of the educational program, which hopefully that's not the case, I have to prep that contractor and say "the students are going to have questions, they are going to be inquisitive, do you have an issue with that?" (Chris Cooper, course tutor)

While Chris was the contract manager, the students had an overall group captain. To develop a sense of team-work, they were split into two teams, each with a captain, thereby modelling the work practices of contracting crews on jobsites. Students would work on allocated tasks either individually or in small groups, with Chris teaching them on a one-to-one basis and supervising their work. In this apprenticeship model of working, the emphasis was on the high quality completion of the task to the satisfaction of the householder and there was little front-loading of knowledge as practice was deconstructed to draw out underlying theory later. While the assessment for the English and Mathematics components was portfolio based, the assessment for the construction credits and the work placement credits was competency-based and conducted within an authentic context. It related to the successful completion of real tasks 'Because that is what this is all about - transition from a high school stage to get them ready and prepped for contracting.' (Course tutor). This resulted in a highly rewarding and authentic work and learning experience for the students.

4. House Building at Darwell High School

This construction programme built new houses in conjunction with major building firms. The programme had commenced some 20 years ago and operated through three parallel groups each working on their own house. The programme was now building its 69th, 70th and 71st houses. About 1200 young people had passed through this Darwell High School programme and comprised a large percentage of the local construction work-force aged under 25. Each group on the course worked on a different building site with a single teacher directing and overseeing their work. This case study focuses on one of these groups, led by Dave Dodworth, a former house framer.

Recruitment publicity advertised the course as a 'four credit package that prepares students for careers in carpentry, construction management, roofing, plumbing and electrical'. It was a semester long course which covered Construction Technology and work placement credits together with Mathematics and English or Business credits. The course was part of the Specialist Skills Diploma for Construction and the Young Apprenticeship programme.

After an initial three days orientation at the school, the students would spend the remainder of the semester on a building site, working on the construction of a house, from forming the foundations through to plaster boarding the interior. This work was undertaken under the supervision of the course leader who would oversee the building of the house and the individual tasks allocated to different groups of students. Dave would work with individuals or small groups and dispense knowledge on a 'need to know' basis depending on the requirements of the particular task.

The students clearly gained from the whole experience of being on a building site, watching and working alongside a wide range of building trades. They were very much at home in this environment, coming from similar backgrounds as the workers. Some were even working on house building as a part-time job or with a relative.

The students appreciated the way they could try aspects of several trades to find their preferred specialism within construction, though Dave pointed out that in reality on a building site they would be told what to do and the tasks would be much more restricted and repetitive. He said that he took this more realistic stance with them from time to time, just to show them the way it would work, but that they were much less keen on this.

While the course assessment requirements included written assignments which integrated learning outcomes from the Technology, Mathematics, English and Business curriculum, including

an end-of-course project report, the main thrust of the assessment was competency-based and related to tasks undertaken naturally during the course of building the house:

Then I do performance assessments too, like I rate ... I give them all a task, framing the walls for instance (...) what I do is, the exterior wall is like a formative assessment on the kids, I teach them that, right? And I allow them to learn, you know, by doing that. And then once the exterior walls were up, I broke them down into groups and I took the plan and I colour coded the different walls that that group would do so they had to find them on the plan, they had to find the information off the plan, they had to lay it out on the floor or had to build these walls, and so I gave them like a checklist that came up to 120 points or something like that. (Dave Dodworth, course tutor)

Dave recognised that there were two sets of expectations at play in the course but believed that the industry expectations and the Construction Technology learning outcomes could be married together: 'We have this informal idea of expectations and then there's the formal one - I think we make it work.'

Dave was clear that his programme involved only real tasks in a real context, no simulation nor even any 'made-up tasks' that weren't necessary for the building of the house. This stance sat comfortably with the concept of authenticity which pervaded the overall programme.

5. Radio Journalism at Etherington High School

The course involved a group of students at the academically-oriented Etherington High School running a community radio station within the school 'to learn about journalism, sound production and music' and give them 'the hands-on experience you need to study radio or journalism after high school' and subsequently 'pursue an exciting career in broadcasting' (Course recruitment publicity). The credits covered by the one-semester course were Communications Technology and Media English as well as two co-operative education credits which were gained through working full-time in the radio station as they studied.

The radio station broadcast live to the school and to the surrounding community both directly and via a website, from 8am to 6pm weekdays. It was based within the school with its own suite of rooms. The students were involved in all aspects of scheduling, planning, scripting and hosted all the programmes. Competition to get on the course was strong and a key criteria was commitment to a career in broadcasting.

The running of the radio station was highly professional and the course leader, Eddie Ellison, acted as Station Manager with the students having formal titles and responsibilities for different functions, such as IT Manager or Music Manager. The radio station had to conform to all technical requirements and content obligations for a community radio station. Students were aware of the broadcast standards and of what they could and could not do and the proportion of different types of music and content they had to observe as a community radio show. A common phrase was 'we have to do it this way or they'll take the license off us'.

Eddie had only had limited experience of the radio industry and the joint emphases in the running of the radio station, and thus the course as a whole, were enjoyment and high standards. Despite the highly organised approach, there was little contact with other radio stations, whether community or commercial stations, and students did not get the opportunity to undertake visits or external work experience placements.

The group was mixed-age and mixed-ability covering three school grades, including the returning students who came back as 'veterans' to assist with the running of the station as well as to gain further credits. Eddie was highly flexible in allowing a diversity of credits according to what the young people required to graduate from high school. Apart from one formal class per week and the daily news editing meeting, the curriculum was therefore highly individualised according to their curricular requirements and the different roles assigned to students and to the particular radio shows that they had responsibility for researching, preparing and presenting. This diversity resulted in assignment tasks covering a range of different learning outcomes.

I have to do most of teaching one-on-one, individual students getting individual credits. Which sometimes doesn't take that much work because when you figure out what assignments are suitable to those curriculum needs you get them working on the assignment and just naturally they are going to come to you: 'I'm having trouble with this wave form'. We'll sit down and just work on it and 'Hey, guess what, that covers 1.2 under the Comm. Tech. for Grade 11. Great. Done. We've got that one. Good. And when I evaluate your show, I'll be watching for that'. (...) I try to get rich opportunities for evaluation. I'm not big on knowledge tests, Ok. I want things where the kid looks into their toolbox and says: 'Well, I'm good at this. I can show off in this way.' So I make sure that those task are rich. (Eddie Ellison, course tutor)

With regard to the work-placement credits for cooperative education, Eddie sought to operate in a different mode, taking the role of an employer and simulating the workplace. However, despite this emphasis and the highly organised and successful running of a radio station, the course offered little exposure to a genuine employment site and reflected Eddie's background as an English graduate and teacher. This said the course did not profess to prepare students for direct entry to the workforce but rather via further education and training and the students saw it as ideal preparation for applying to some of the most demanding courses in broadcast journalism.

Vocational dimensions

We now turn to an overview discussion of the case study programmes using the dimensions of the vocational framework which was used in the course of the fieldwork and the analysis of data.

A. Institutional Context

While all the schools were fully committed to providing programmes as part of the board-wide provision, they did not have particular institutional specialisms and would offer a diverse range of specialist programmes, principally according to teacher interest and expertise. As such the case study programmes stood as discrete entities, unrelated to other curricula within the schools. Only in two schools was there any discernible relation to the school's particular mission, other than a general commitment to providing a range of programmes and pathways. In one case a school in a socio-economically deprived area had a long-standing history of providing collaborative programmes, both to respond to perceived needs of its students and to ensure that it did not suffer unduly from declining roles. In the other case, the ethos of a further school with a much stronger academic tradition was clearly reflected in the Radio Journalism course.

A clearer influence on the nature of the programmes was a strong commitment to providing a diverse range of technology pathways within the school board, reflected within and supported by the host Technology departments of each of the case study programmes. Within these pathways was an emphasis on providing a board-wide group of Technology-based and occupationally-

specific programmes designed to meet the progression needs of students who were seeking a vocational pathway.

B. Purpose and Aims of the Course

A key driver for the package of the board-wide programmes was success for all students to minimise school drop-out and enhance life chances through increased graduation rates and appropriate progression to further study, training and work. Forming a sub-set of this provision, the case study programmes, with the possible exception of the Radio Journalism course, were essentially school-work transition programmes.

In line with this vocational orientation, each of the courses made clear statements in their publicity and recruitment material regarding preparation for future employability within the relevant sector, either direct progression to training and work or via further study. They also provided an opportunity for students who were wishing to investigate or confirm whether this might be a suitable pathway and career decision for them.

The programmes provided a range of consolidation or progression routes. Students would normally have the opportunity to repeat the programme in a subsequent semester or to take a related programme, in both cases developing the skills gained further. For these vocationally-oriented programmes formalised pathways included progression to college through a dual-credit scheme and articulation with a college programme, or potential progression to an apprenticeship through the province's Young Apprenticeship programme.

C. Student Recruitment

The five case study programmes clearly had a strong orientation to their particular vocational sector which was highlighted within the individual programme aims as promoted to potential students. Unsurprisingly the students recruited onto the programmes mostly had a strong interest in exploring or entering the occupation or industry sector concerned. In some cases, for the higher-demand programmes, this would already have been established as part of an interview with the course leader or through a guidance interview.

The very many students for whom this was clearly a positive career decision tended to fall into two main groups: those who had a very clear view of precisely what they wished to do and of the role of the programme in helping them achieve this; and, those who were using the programme to explore which particular specialism or sub-trade they wished to follow within their chosen sector. There was usually also a small group who were much less clear and had been placed on the programme following through a guidance process targeted at student success. Students in this latter group often found that as they worked through the programme that this was a suitable pathway and became strongly engaged in the program.

Across all these different groups of students, including the small group of students who had been placed on the programme, it was abundantly clear that being on the programme was a very positive experience and was directly meeting their interests and needs. They frequently described their programme as 'awesome', 'amazing', 'fun'. This experience would tend to confirm a student's decision to follow the given pathway. Furthermore it was noticeable how much each student, even the academically strong ones, gained in confidence both generally and specifically with regard to their vocational skills across the Fall Term. This supports the findings of Smith and Hill (2005) whose work focused on student motivation.

In some cases students were returning for a second or third time to the same programme, enabling them to deepen and extend their vocational skills, or to specialise, such was the variety of experiences available on the programmes. Such students were often referred to as 'veterans'. These veterans were seen as particularly valuable to the programme as they set both the standard and tone of the programme. In particular, they were of considerable help to the programme leader, typically taking on roles such as a team captain within the group, or within a specialised area of programme, but more generally in being a role model and taking a lead as a source of experience for other newer members of the programme. While this experience was of clear help to the teacher as well as to the group as a whole, it made a major contribution to the self-esteem and confidence of the returning students as well as developing their vocational skills further.

A further dimension that was supportive of the vocational orientation of programme was when a good number of students on the programme had one or more family members working in the relevant vocational sector. This was the case with one of the construction programmes where students would often have a relative who specialised in a particular trade. Sometimes the students had themselves prior or concurrent experience of part-time or summer holiday work in the industry, often working for a family member. This background, which had earlier influenced the decision to follow the programme, together with the experience of veterans tended to assist with the development of a vocational culture within the group of students on the programme.

D. Resources and Staffing

Students on the case study programmes had access to resources and facilities that largely approached or reached the industry standard and often indeed were by definition at industry-standard since they formed part of the workplace in which students were either placed or were working as part of the programme. Such facilities were occasionally supplemented by access to specialist facilities at a local community college.

Another facet of the world of work that was constantly present in terms of resources related to industry regulations, whether these were generic ones regarding health and safety or were part of an industry-specific set of external regulations and requirements with external audit and inspection of the end product. Teachers on the programmes would engage students with this auditing or inspection process, and even directly with the assessors themselves on their visit, for example asking construction inspectors to talk to the group about what they were looking for, how they went about their job and what they found. Other similar *ad hoc* learning opportunities for students would be taken by the teacher with sub-contractors, other workers, employers, and occasionally customers, coming onto a work-site.

In terms of staffing, the work-related programmes of the school board were typically taught by a single teacher who had a strong vocational background with many years experience working in the relevant vocational sector or specific trade. The five programmes which served as case studies for this research were no exception.

Four of the five teachers had substantial experience working at a variety of levels in a range of contexts within a trade which was central to the vocational sector of their programme. The fifth teacher had considerable expertise in an academic discipline which was directly relevant to the programme supplemented by some direct, albeit limited experience of the vocational area. His knowledge of the relevant industry practices derived more from his own experience and analysis of the industry from a customer stand-point and from visits to employer sites and industry-specific conferences.

Those teachers who had come direct from working in a particular industry, and who in several cases continued to work in it during holiday periods, brought with them a wealth of vocational experience and expertise together with an extensive network of contacts which were of immense value on several levels.

Firstly, they assisted the teacher in maintaining an up-to-date understanding of the latest industry practices and employer expectations. This fed directly into the curriculum and to the resources and facilities required to prepare young people to enter further training or work in the particular sector. This will be discussed further in the following sections.

Secondly, this network of industry links enabled the garnering and maintaining of employer support for the programme as the employers from the relevant sector clearly had considerable confidence in the expertise and experience of the teachers, valuing their opinions and seeing the programmes as being appropriately led and industry-relevant. This labour market insight and credibility in the eyes of the employers was of considerable assistance when it came to the organisation of additional opportunities for the students.

Finally, the teacher's occupational expertise and years of industry experience resulted in high levels of credibility with the students. The teachers were able to speak with considerable authority regarding specific skills, industry practices and employment in general. This gave them the ready respect of their students. This was also true of the teacher whose background was essentially academic rather than vocationally-specific since here there was recourse to a set of high-level professional skills derived from a discipline.

Clearly those students who undertook a work placement within the relevant industry and those whose programme operated in a work-place environment external to the school were able to observe and come into contact with industry employees and practices. This gave them the insight of being taught by some-one who was not ultimately a teacher. One employer said he treated the young people as his workers and would give them stern words if they did not meet his standard:

I say: "I am not your friend, I am not your teacher and I am not your parent - and if you mess up I'll scream and shout", like I would at any other worker that messed up. (Building contractor)

Despite this stance, I observed him with the students and he was effectively teaching them and was clearly very used to apprentices. These opportunities and work placement in general not only permitted greater insight into work practices to assist student learning but also assisted the students in the process of forming a judgement as to whether this was a suitable pathway and industry for them, and if so in which particular aspect or trade they wished to specialise.

E. Curriculum

All five work-related programmes had elements of a 'natural curriculum' in a work-place setting (Munby, Chin and Hutchinson 2000). To a greater or lesser extent they made provision for authentic and practical projects either through Work Experience placements or through genuine tasks in a real-world context with external constraints. This was typically part of the cooperative education which took two main forms.

On the house construction, renovation and radio journalism programmes, the cooperative education was internal to the programme and wholly integral to the learning experience which took

place in a business context where the students were working on an end product to be supplied to a customer. Here the programme was designed to provide the work-place and the work-place experience was effectively the curriculum, though formally students were following and being assessed on discrete credits as indicated above.

For the millwrighting and automotive courses, the programmes formed part of the Young Apprenticeship programme and here the cooperative education took the form of individual work placements on employer premises, combining the 'vocational learning' of the school programme with the 'work-based' learning of the work-place (Hodgson and Spours 2008). These students would work with a team of employees and be directly exposed and indeed commence the process of induction into the work-place culture of the relevant sector.

In all five cases, the teacher typically took on the role of employer, and to some extent therefore the customer, though there was some awareness in the students of a customer beyond the teacher. This customer-awareness varied considerably and the main focus of the students was on satisfying the demands of the contract in general and, more immediately, those of the teacher who was effectively the contractor. This modelled industry practice where the workers would rarely come into direct contact with the customer.

One striking feature of the programmes was how absent the concepts of curriculum breadth and balance were from the discussions with the teachers about their course where it was seen as entirely appropriate for a student to concentrate on just one form of Technology for a whole year, sometimes repeating the course once or even twice to focus on a different aspect. This contrasts with curricular rhetoric, and often qualification requirements, in many European countries where the notions of breadth and balance are central to upper secondary qualifications (Phillips and Pound 2003).

As we have seen three of the five case studies were programmes that led to the province's Specialist Skills Diploma, an award that requires four credits focussed on the particular sector, two cooperative education credits in a relevant workplace plus a range of other credits and activities wholly or partly linked to the chosen pathway. Not all students on the programme would be following the curricular requirements of the Specialist Skills Diploma, but those that were obviously had a much more extensive and broader programme of engagement with the particular vocational sector.

F. Pedagogy

The students seemed to be task-oriented and this was mirrored in the pedagogical approach which was characterised by a strong focus on authenticity in tasks to be performed or products to be made, with a degree of problem-solving where difficulties or unpredicted situations were met. Plenary sessions with the whole class were generally infrequent and learning was predominantly task-based with students working in a differentiated way under individual instruction from the teacher according to individual learning styles, ability and the task being performed.

Across the case study programmes theory was not front-loaded. The vocational and technological theory which was inherent in the tasks required by the programme was covered in an experiential way and deconstructed later in these occasional plenary sessions, with the underlying theory being drawn out of specific tasks that the students had undertaken. The same approach was taken to mathematical knowledge.

Collective responsibility was a strong feature of the task-led learning approach and teachers encouraged the development of specialist expertise in students and the leading of tasks related to their particular occupational specialism. Students would often work in a series of teams to cover all aspects of the production process. They were fully aware that their product was a real-world one with external consequences if quality was not high, the delivery was delayed or regulations were not followed. Several students commented how much this responsibility for leading these teams, even for one-off discrete tasks, had boosted their confidence.

Where the teachers had a strong vocational background, it was apparent that they were modelling vocational practices within the programme, for example a strong focus on health and safety practice. This was also the case for their teaching approach which was based on induction and training practices within their industry. As we have seen above, they would typically draw upon the individualised training mode of the master/apprentice relationship with which they were familiar.

G. Assessment

In line with the task-led approach to learning, assessment of the curriculum expectations was outcome-based, and strongly oriented to the evaluation of practical work and technical skills. This competency-based assessment thus tended to have an experiential element, based on continuous assessment of learning outcomes, sometimes supplemented by portfolio work, with summative theory testing at the conclusion of the programme where appropriate.

Arguably one of the aims, and legacies, of the outcome-based approach to curriculum assessment has been to make the criteria for successful completion transparent and comprehensive to learners. This brought the concomitant danger of the atomisation of the curriculum and instrumentalism on behalf of both teachers and learners (Torrance 2007). On the case study courses however, the learning outcomes and assessment criteria were not foregrounded and tasks were seen as much more integrative with teachers taking a more holistic view of assessment with the deconstruction of tasks to ensure learning outcomes were met.

The influence of the teachers' vocational background could be seen in that this more holistic assessment of the formal curriculum expectations was set in the additional context of more informal vocational criteria derived from their own experience of the standards expected in the work-place. This applied principally to the cooperative education credits and but could also be clearly seen in relation to the curriculum expectations of the Technology credits. This more contextualised approach revealed the values of the teachers for whom what seemed to really matter was whether the student would eventually become a successful worker in the chosen industry:

'Real assessment in this comes from watching somebody and seeing if they have what it takes or not, and putting them in situations where they need to think about what they are doing.' (Course tutor)

Concluding comments

In exploring the lived reality of the case study programmes and the various factors that contributed to their vocational nature, it became clear that the courses had two related aims: an introduction to working in the relevant industry, and the development of high-level technical skills relevant to working in this sector. The balance between these two aims varied by course.

For the motor vehicle maintenance, the house building and the house renovation courses, on which vocational discourse and practice was all pervasive, the programmes were effectively providing exposure to both the workplace in general and the trades concerned. The courses thus served as an induction to the 'community of practice' within the given industry through peripheral participation (Wenger 1998) as the student learning context both increasingly involved authentic tasks with real-world consequences and was either wholly or partly the work place. Students worked alongside industry professionals and were exposed to the culture and work practices of the trade. These courses might thus be seen as occupationalist, though embodying a broader and more context-driven concept of authenticity compared to more narrow competence-based approaches where authenticity is seen to derive from the precise delineation, practice and assessment of highly specific skills.

For the millwrighting and radio journalism courses, the focus was much more on the introduction and development of specialist skills relevant to the industry as preparation for further training or direct entry to the workforce. While the running of a community radio station involved a wide range of authentic tasks as did the community projects of the millwrighting course, the general work context and the induction to the vocational culture of the industry was of secondary importance although some millwrighting students would gain this as part of a linked work experience in the second semester.

The depth and extent of the vocational culture of a programme depended not only on the location of the programme in a work place, the availability and nature of resources and facilities and the integration of workplace routines with real-world activities and tasks, but critically, as Yates (2006) also found, on two key sets of attitudes and orientations, those of the students and their teachers.

Student dispositions and identities, in particular their learning and career aspirations, and their prior and evolving attitudes to the vocational sector as well as to the curriculum activities, pedagogy and assessment tasks on their course were an important influence on the vocational nature of the course. To some extent, the marketing of the courses regarding their aims and specificity led to self-selection by students and while this increased the likelihood of a positive orientation to working in the relevant industry, it was the prior knowledge and involvement of students in the sector, through part-time or summer work or through family connections in the occupations concerned, coupled with the involvement of former course members as veterans, that supported the vocational culture.

Central to and driving the vocational character of the courses was, however, the nature of the teachers' own background and their philosophy regarding the nature and purpose of their programme. This was expressed through the differing aims and conceptions of the programmes and the range and type of learning experiences provided as well as their approach to teaching and assessment, and was reinforced by the extent of their experience and contacts within the industry. So while the teachers all had a formal curriculum with prescribed learning outcomes to follow, it is relatively easy to concur with the findings of Bloomer with reference to his analysis of a series of thirteen vocational education case studies that 'the process of curriculum making hinges as much upon the values and views of knowledge, learning, teaching, human nature and educational purposes which teachers bring to bear upon their work' (Bloomer 1997, 86).

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