

THE NOTION OF ‘VOCATIONAL PEDAGOGY’ AND IMPLICATIONS FOR THE TRAINING OF VOCATIONAL TEACHERS – EXAMINING THE FIELD

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Abstract

In South Africa, policymakers and institutions are questioning how to train vocational (TVET) college lecturers, that is, to determine the ‘mix’ of theory practical or workplace experience. How do we construct a curriculum for the training of vocational educators, and how is this training different from the training of school-teachers? This article argues the importance of a relevant curriculum, consisting of the appropriate mix of pedagogy, specialist vocational knowledge/skills and practice. Exploring ‘vocational pedagogy’, the article holds that the imperative to provide vocational teachers with a vocational pedagogy has major implications for vocational teachers. Extant literature is explored to examine the validity of the construct informing the design of relevant, appropriate curricula for the training of vocational college lecturers.

Keywords: vocational pedagogy, vocational teacher preparation, pedagogical skills, workplace experience

INTRODUCTION

In South Africa, following wide-ranging reforms in the ex-technical college sector (now referred to as the FET College sector) the work of college lecturers is shortly to be ‘professionalised’ through the institution of a framework of recognised qualifications and standards for vocational teacher training. Higher education institutions, (Universities and Universities of Technology) as the potential providers of such training will be faced with the challenge of constructing a curriculum according to official national standards. Based on current practice and the dearth of TVET experience in our traditional universities, it seems inevitable that the template that will be used by faculties of education will be that of current school-teacher preparation programmes. Indeed a 2007 survey of training programmes offered by universities to FET college lecturers in South Africa showed that in the absence of a suite of specialised, recognised vocational teaching qualifications, general teacher training programmes were being adapted which to a greater or lesser extent reflected the provider’s understanding of the FET college context and its educator needs.

However, scholars in the field of vocational education argue that it is important for training providers, FET colleges and ultimately learners that a relevant curriculum be arrived at consisting of the appropriate mix of pedagogy, specialist vocational knowledge/skills and practice. Furthermore, writers in the field speak to the notion of a ‘vocational pedagogy’, also a topic of exploration in this paper. This article argues that the imperative to provide vocational teachers with a ‘vocational pedagogy’ has major implications for the training of vocational teachers. In addition, it examines some of the extant literature in order to glean the validity of the construct informing the design of relevant, appropriate curricula for the training of vocational college lecturers. In a context where vocational education has come under the spotlight and major reconstruction is under way, it is important that development be

underpinned by an understanding of what already exists, what works and under what conditions.

The context of vocational education in South Africa

Recent changes

In a relatively short space of time (2001-2003) public colleges were merged from an inequitable assortment of 152 small individual colleges, to 50 mega-institutions which are multi-site and diverse, there has been huge investment by the state through the recapitalization process started in 2005; a new FET Act was gazetted in December 2006 giving colleges increased, autonomy, a new vocational curriculum was implemented in 2007 with the advent of Level 2 vocational programmes which are state subsidized; and so on. FET colleges have for the first time found a place in the sun even though rapid changes have been unrelenting. However, colleges still have some way to go to overcome a legacy of negative perceptions and stereotypes about vocational education and the many challenges to be addressed: the challenge of diversity - dealing with students from a range of educational and social backgrounds, impoverished students, providing adequate life-skills and career counselling services, and catering to an extensive list of demands, to name a few.

Expanding delivery

Our Minister of Education in a conference held at Birchwood Conference Centre, Johannesburg pointed to colleges being increasingly viewed as ‘major drivers of the emerging skills revolution in South Africa’, and exhorted the college sector to expand its delivery substantially. The sector is expected to increase its enrolments to at least 1 million learners within the next 5-10 years, a considerable increase from the approximately 370 000 learners currently. Research carried out in 2002 showed about 7000 educators in teaching or management positions in colleges. It is reasonable to suppose therefore that the number of educators needed to teach in colleges will have to increase exponentially to cope with increased numbers of learners. Where are these educators to be found and how are they to be adequately and timeously prepared to discharge their responsibilities?

Staff conditions

In addition, there is little incentive for new entrants to college sector teaching. A potential college educator who is a well qualified and experienced technical graduate, would probably earn more in the private sector as either a trainer or an employee in his/her field of expertise. Fisher et al noted in their 2003 HRD Review, that little had changed since the TVET Sector Review ten years earlier which commented on the “lack of staff development, uncompetitive salary levels and school-like conditions of employment”. They continue:

We need to ask not only whether college staff members are appropriately trained, qualified and experienced, but whether the post structures, management arrangements, conditions of employment, reward systems and support structures are in place to enable the effective utilization of the colleges’ own human resources. (ibid: p.341)

It is therefore urgent in South Africa that we begin to nurture and develop a cadre of educators who can take the college sector forward, with the right combination of pedagogy, practice, workplace knowledge and experience; practitioners who understand what the sector needs to meet a range of diverse demands and to face a new vocational curriculum with confidence. The responsibility of managing the human resource component of colleges now falls to College Councils as new employers in terms of the FET Colleges Act of 2006.

Staff profile

According to research published by the Department of Education in 2004, the average age of teaching staff was 42 years, and indications were that ‘there has not been a significant number of young teachers entering the sector’. At the time of the 2004 report, only 15% of teaching staff (nationally) held higher degrees, 28% degrees or higher diplomas, 43% held diplomas and 7% were either un-or under-qualified. It is difficult to say though, what these qualifications comprise, whether they are teaching qualifications or not. These statistics would also have distinct variations within provinces however the figures have implications for the kind of qualifications lecturers would gain access to. For instance a postgraduate teaching qualification which relies on candidates having a first degree might have a limited uptake among college lecturers. We will have to wait for more recent and fine-grained quantitative results to see whether these figures have changed significantly and in what respects, but the indications are that future lecturer qualifications would have to cater for new entrants to college teaching as well as continuous professional development, given the expected increase in educator numbers and the range of qualifications which college lecturers hold. Historically, college lecturers were drawn from the ranks of business and industry – people who themselves had technical qualifications as well as solid vocational practice and experience, and were able to apply this in their delivery of the traditional national syllabuses in colleges. Many of these lecturers subsequently acquired education theory and pedagogy through now out-dated education courses offered at the old Technikons, through regular teacher training programmes or ad-hoc workshops and short-courses. However, college lecturers have never been part of a formal framework of qualifications recognized for teaching in colleges.

Future staff qualifications

Qualifications for college educators must therefore address initial training for new entrants and for existing un/under-qualified college lecturers, as well as continuing professional development. Initial educator training might be needed on a large scale for current college staff who entered colleges with no teaching qualifications at a time when these were not required. For those who have teaching qualifications or who acquired them a very long time ago, upgrading and continuous professional development would be needed to assist lecturers to cope with modernized college curricula and changes in the skills training environment. It is apparent that there cannot be a ‘one size fits all’ approach as vocational teachers enter colleges from varied backgrounds and experience. Appropriate points of entry into the system of vocational teaching will have to be considered to take account of this.

Policy challenges

Articulation of educator qualifications across the different contexts in which education and training occurs is a cause of frustration in South Africa, as is the case in many other countries. Parity of esteem (and its perceived benefits) between vocational teachers and general academic teachers is a recurring theme even in countries with better established vocational systems and many years of experience. What compounds the problem in our context is the fact that, in spite of a single National Qualifications Framework legislated in 1995 there will shortly be three distinct tracks along which our education and training system will operate. Each of these tracks, Higher Education, General and Further Education and Trades and Occupations, will be subject to its own qualifications and awards system. FET Colleges are likely to offer qualifications within each of these tracks which means that college lecturers could be required to teach a range of different programmes, from the more generally vocational to the more occupationally specific. The training of college lecturers though, in spite of subject specialisms that lecturers might hold, is likely to be located with

faculties/departments of education in universities or universities of technology, as this is where expertise in pedagogy is recognised as residing, and which may offer better prospects for parity of esteem between general and vocational educators. In the private occupational training system the focus has tended to be on the training of facilitators, assessors and moderators of workplace training programmes, but certificate holders of this training have experienced difficulty in trying to access educator training programmes in higher education on the basis of this achievement. While a recognised framework of qualifications for vocational teachers may bring some coherence to the training of college lecturers, workplace trainers subject to the different requirements of their occupational sectors might remain outside the loop and struggle to articulate with the system of vocational teaching in colleges. This is likely to continue to be a contentious issue and one which will require further thought and investigation.

The Preparation of Vocational College Teachers

Grubb (2003) notes that:

There is not, in most countries, a community of instructors worrying about the nature of teaching in occupational and professional subjects, and therefore nowhere for instructors in tertiary institutes and colleges to turn if they want to improve their instruction. So occupational instructors are faced with a serious problem: their teaching is in many ways more difficult than teaching in standard academic subjects, but they appear to have fewer sources of information and support related to pedagogical issues (p.21).

Countries across the world have moved towards professionalising VET teacher training, characterised by the demand that VET teachers obtain teaching qualifications, setting national standards for training, licensing VET teachers and setting up monitoring and evaluation structures (Simon and Thomson,2007). Universities have in most cases tried to map these standards onto their existing courses, however many have found the standards to be cumbersome for programme design (Brand,2007). South Africa does not as yet have national standards for training vocational college teachers, but these are anticipated to be published by the national Ministry of Education before the end of 2008. In 1998 (revised in 2000), national Norms and Standards for Educators in schools were published, which received a range of reactions from university academics, largely negative. Reasons cited were, amongst others, the vaguely worded outcomes which lent themselves to wide and varying interpretations, the overwhelming number of outcomes that made programme planning piece-meal and difficult, and the difficulties associated with assessment of some outcomes that might only be achieved after several years of practice as a teacher (Matson and Barasa, 2008. Fraser, Killen and Nieman, 2005. Sieborger and Quick,2002). It remains to be seen how national outcomes for vocational teacher training will be set out and how universities that intend to offer such qualifications will engage with them in a curriculum development process.

The Department of Education case study research report on ‘the challenge of staffing’ in the FET sector, noted the areas of knowledge and skills expressed by lecturers in focus group discussions as, inter alia, the following (p.64):

1. Subject area knowledge in various vocational fields
2. Curriculum and materials development
3. New modes of delivery
4. Assessment approaches
5. Quality assurance systems

6. Research skills

Straddling education and the world of work, as college educators do, means that lecturers who teach workplace skills need exposure to the workplace so that they understand the technologies and practices their students will need in order to be 'work ready'. Working with a range of ages and stages of students, from young adults to older workers, suggests that lecturers understand different learning styles and can apply appropriate pedagogies. In sum, these are aspects of vocational teacher preparation that will have to be taken into account in building a commonly understood vocational pedagogy and training curriculum. We do not have to reinvent the wheel, as across the world there are models we can learn from and adapt to local contexts.

Defining vocational pedagogy and curriculum implications

It is argued by some theorists that vocational pedagogy acknowledges the specific nature of vocational knowledge and makes a connection between 'abstract' and 'situated' knowledge. A model of this is posited in essence as the combination of subject knowledge, practical work experience and teaching/education expertise (Barnett, 2006. Gambel, 2004. Young, 2006). How is this different from the traditional notion of 'pedagogy' in, for example, the training of school teachers?

Barnett (2006) describes vocational pedagogy as a pedagogy that *'faces both ways'*, a mix of situated knowledge and disciplinary knowledge that is the foundation of any form of vocational knowledge:

Vocational pedagogy, the content and process of vocational learning and teaching, is influenced on the one hand by workplace activities and on the other...by disciplinary knowledge (p.145).

It is the nature of vocational knowledge, according to this view, that distinguishes vocational teacher preparation from that of general teacher training, and calls for a distinctive vocational pedagogy (p.144). Vocational teaching thus has to grasp the importance of integrating particularised, practical and situated knowledge (horizontal knowledge) Bernstein's (1999) with that of abstracted, generalised, discipline based knowledge (vertical knowledge). The implication for trainers of vocational teachers is that this understanding of vocational pedagogy should be incorporated into training programmes. It should also be realised that this is where programmes aimed at training general school teachers might fall short.

Generally, university preparation of school teachers is focused inter alia on pedagogies and practices aimed at the teaching of children, drawn from traditional disciplines that have informed Education, for example Philosophy, Psychology and Sociology. The training programme for teachers of general education offers a broad and academic orientation which builds on student teachers' subject matter knowledge and prepares them for structured classroom teaching. Young (2006) emphasises that "the vocational role of colleges, as well as the age-range of their students, is what distinguishes them from schools..." (p.156). How far does school teacher preparation go towards addressing the perceived needs of vocational educators and establishing a 'vocational pedagogy' or how different would the training of vocational teachers need to be? It is instructive to turn to international models of vocational teacher preparation in this regard.

Cort, Harkonen and Volmari, on Cedefop report (2004) on the professionalization of VET teachers makes a clear distinction between the *kinds* of knowledge vocational teachers ought to have, as follows:

Teachers and trainers in VET require two distinct sets of skills. They need pedagogical skills...these are generic skills needed by all teachers regardless of the discipline in which they work. VET teachers also need vocational skills and knowledge...and also have a firm grounding in the theory underlying these skills (p.10).

This description separates knowledge (and practice) of teaching from vocational knowledge and skill, rather than what I call 'essentialising' a vocational pedagogy as described earlier in this section. For university faculties of education this view might imply that the same set of generic skills offered to teachers in schools could be offered to vocational teachers except that, for the latter cohort, additional vocational skills and knowledge would have to be acquired. However, without acknowledgement of the particular nature of vocational pedagogy, generic teaching skills would have little value and would simply be regarded by college lecturers as inadequate for their purposes.

A workshop in Helsinki (Ttnet Workshop,2001) identified key issues (p.13) to be addressed in any curriculum for the training of VET teachers, in terms of which Cedefop conducted ten case studies in six different European countries to gather 'good practices' which could inform policymakers and teacher training institutions. The case studies were intended to identify vocational teacher training programmes which had best demonstrated, in their curricula, dealing with the key issues confronting vocational educators as outlined below:

1. New, diverse target groupings, especially adults, their various skills and previous experience;
2. Changing paradigms in educational theory eg. Teacher as facilitator, learning styles, broad range of teaching methods;
3. ICT development: using ICT as teaching tools, e-learning, blended learning;
4. Labour market development: keeping teachers up to date with new technologies and work practices, updating vocational skills;
5. Internationalisation wrt knowledge of trades requirements, intercultural communication skills;
6. Changes in national VET legislation – preparing teachers for rapid reforms in VET systems;
7. Changes in the organisation of teaching – cooperation with other teachers, joint planning, team teaching;
8. Meeting teacher needs – providing teachers with formal qualifications, raising salaries and improving career paths.

In the report on selected training programmes in the 6 European countries the authors discuss what is constituted by 'pedagogical skills' and 'vocational skills'. They characterise the former as educational theories, teaching principles and teaching support in the form of project management skills, administration and integrating ICT in teaching. Vocational skills on the other hand are specifically related to the vocational subjects being taught and to direct experience of the world of work obtained through 'twinning' arrangements (eg. in Finland and Italy) between workplace instructors and teachers. They hold that the concept of 'on the job' learning is becoming commonplace for updating vocational skills and improving

teachers' contact with the world of work, and in some cases at the same time improving workplace trainers' pedagogical skills.

An overview of the Danish model of in-service training of vocational teachers reveals a specific module in student background and vocational pedagogy. The broad aim of the programme is that participants acquire the basis for (1) working as a VET teacher, (2) for continued professional and personal development and (3) for continued vocational pedagogic education. Part of the programme consists of the study of theories of learning, teaching, vocational pedagogy, philosophy, youth sociology and other relevant subjects. DEL (a specialist vocational teacher training Institute) prepares a voluminous list of relevant literature that must be studied, an understanding of which must be applied in the various assignments and exercises included in the programme. It would appear from the course outline that the notion of a vocational pedagogy is closely linked with preparing the teacher to teach in a vocational context, and one would need to go deeper into the content of the course to determine how the construct is understood in the Danish context.

Ignoring the nature of vocational knowledge means that preparation programmes will not take account of the *duality* of vocational knowledge, that is, that vocational teachers need "specialist knowledge of occupations (including workplace experience/exposure) ...and specialist pedagogic knowledge" (Young, 2006). In addition, Spencely (2007) found that there was a need for educators to be mentored in order to make the transition from vocational expert to educator. It would appear, therefore, that university teacher preparation programmes, especially within the traditional academic universities, could not provide for the full spectrum of vocational educator needs, and that a partnership model between universities that offer specialised technical knowledge, traditional teacher education and where appropriate experiential workplace sites, would result in a vocational pedagogy suited to the needs of vocational teachers. Young proposes a partnership model of vocational teacher education provision but cautions that professional development of college teachers would need to "address the issue of specialist vocational pedagogy and curriculum knowledge in a way that has not yet been tackled in the UK" (p.159). The UK experience has revealed the weakness of vocational teacher preparation to be the lack of focus on the specific knowledge and skills that vocational teachers are required to teach, as an OFSTED report (2003) concluded:

The current system of FE teacher training does not provide a satisfactory foundation of professional development...While the tuition that trainees receive is generally good, few opportunities are provided for trainees to learn how to teach their specialist subjects, and there is a lack of systematic mentoring and support in the workplace (p.2).

Schofield and McDonald, cited in the Australian NCVER Report (2006) believe that to improve professional growth, guidance to teachers and assessors needs to be provided at a pedagogical level, as well as considering ways in which practitioners can develop a common understanding of standards, evidence requirements and assessment practices. Research conducted by the Centre for Undertaking Research into Vocational Education and the University of Ballarat (2003) acknowledged the varied needs of VET practitioners as follows:

working with training packages; catering for individual learner differences; learning theory; teaching skills; supporting generic skills development; language and literacy; implementing flexible approaches; work-based learning; and design and modification of resources. They also recommended mechanisms for supporting enhanced teaching and learning practice, including networking, mentoring by designated champions, communities of practice and action learning, as well as formal professional development (p.24).

From the foregoing and taken together, it would seem that there is widespread agreement about what constitutes a ‘vocational pedagogy’ and what the elements of a curriculum to address this need in the training of vocational teachers might contain. What is less clear is where such training is to be located, given that traditional university teacher education programmes might only provide certain elements and more specialized technical institutes offer other. Attwell and Brown (2001) discuss ‘who’ should provide vocational teacher education and cite examples of provision in the UK and Germany, however they hold that debates on who the provider is should not deflect from important matters of “recognition of the curriculum, articulation of courses and learning opportunities” (p.5). Furthermore, they suggest,

a switch of emphasis from initial training to continuing professional development might involve recognizing a variety of different providers of VET professional education – with differentiation through speciality and flexibility – with different institutions providing different kinds of opportunity...Rather than impose a single curriculum model and uniformity it is better to encourage the development of flexible curricular opportunities, with recognition and articulation within a Framework for Professional Development (p.6-7).

In countries such as South Africa at the cusp of professional vocational educator development, this approach holds much potential as it focuses on what exists that can be harnessed in this endeavour. Higher education institutions that have the responsibility for professional teacher education currently have varying specialisms within the spectrum of education offerings. What is needed is the will to share thinking and resources in attempting to arrive at the most feasible model, and to learn from the initiatives of others in the field.

CONCLUSION

The notion of a ‘vocational pedagogy’ is fairly new and uncontested, especially in the South African education context. However the literature on the issue, sparse as it may be, is instructive and convincing about the need for its recognition in curricula for the training and development of vocational teachers. The implication of acknowledging the duality of vocational knowledge is that teacher preparation programmes for vocational contexts are understood to be a combination of teaching expertise, subject specialist knowledge and workplace experience where appropriate, and that none of these elements can be offered without knowledge of the other. The curriculum framework thus has to present the ‘big picture’ within which provision may be structured, and where various providers can contribute their expertise, depending on the model that is favoured.

REFERENCES

- Attwell G. and Brown, A.(2001). “The education of teachers and trainers in Europe – issues and policies”, Paper presented at Fourth International Conference ‘Vocational Education and Training Research, University of Wolverhampton, 16-18 July.
- Akoojee,S., Gewer A. and McGrath S. (Eds), (2005). “Vocational Education and Training in Southern Africa: A comparative study”, Cape Town: HSRC Press.
- Bernstein, B. (1999). “Vertical and horizontal discourse: An essay”, *British Journal of Sociology of Education*, 20(2): 157-173.
- Brand, A. (2007). “The long and winding road: professional development in further and higher education”, *Journal of Further and Higher Education*, 31:1, 7-16.

- Barnett, M. (2006). "Vocational knowledge and vocational pedagogy", In M. Young and J. Gamble (Eds), *Knowledge, curriculum and qualifications for South African further education*. Cape Town: HSRC Press. 143 – 157.
- Barasa, F.S. and Mattson, E. (1998). "The roles, regulation and professional development of educators in South Africa: a critical analysis of four policy documents." *Journal of Education*, 23: 42-72,.
- Cort, P., Harkonen A., and Volmari, K. (2004). "PROFF – Professionalisation of VET teachers for the future", *Cedefop Panorama Series:104*, Luxembourg.
- Department of Education, Republic of South Africa, (2004). "Quantitative Overview of the Further Education and Training College Sector: A sector in transition", Pretoria: Department of Education.
- Department of Education, Republic of South Africa, 2004. "The challenge of staffing: responsiveness in FET colleges", Pretoria, Department of Education.
- Department of Education, Republic of South Africa, 2008. "National Qualifications Framework Bill", Pretoria.
- Fisher, G. Jaff, R. Powell L. and G. Hall, (2003). "Public Further Education and Training colleges", In *Human resources development review*, Cape Town: HSRC Press,.
- Fraser, W.J., Killen R. and Nieman, M.M. (2005). "Issues in competence and pre-service teacher education. Part 1. Can outcomes-based programmes produce competent teachers?" *South African Journal of Higher Education*, 19(2): 229-245.
- Gamble, J. (2004). "A future curriculum mandate for further education and training colleges: Recognising intermediate knowledge and skill", In S. McGrath, A. Badroodien, A. Kraak and L. Unwin (eds). *Shifting understandings of skill in South Africa*, Cape Town: HSRC Press, 175-193.
- Grubb, N. (2003). "The Roles of Tertiary Colleges and Institutes: Trade-offs in Restructuring Postsecondary Education", University of California, Berkeley, U.S.A. wgrubb@uclink.berkeley.edu,
- Mitchell, J., Chappell, C., Bateman A. and Roy, S. (2006). "Quality is the key: Critical issues in teaching, learning and assessment in vocational education and training", National Centre for Vocational Education Research (NCVER) Report, New South Wales, Australia.
- Moos, L., Cort, P., Frimodt, R., P. Laursen F. and Sørensen, M.S. (2006). "VET teachers and trainers training in Europe: – a comparative perspective", Thessaloniki: CEDEFOP.
- Muller, J. (2006). "Differentiation and progression in the curriculum", In M. Young and J. Gamble (eds). *Knowledge, Curriculum and Qualifications for Further Education*. Cape Town. HSRC Press, 66-86.
- OFSTED, (2003). "The initial training of further education teachers: a survey", London, Ofsted.
- Simmons R. and Thompson, R. (2007) "Aiming higher: how will universities respond to changes in initial teacher training for the post-compulsory sector in England?" *Journal of Further and Higher Education*, 31:2, 171-182.
- Sieborger R. and Quick G., (2002). "Defining competence in student teaching: a comparative analysis of practical issues". School of Education, University of Cape Town.
- Young, M. (2006). "Reforming the Further Education and Training curriculum: An international perspective", In M. Young and J. Gamble (eds). *Knowledge, Curriculum and Qualifications for Further Education*, Cape Town: HSRC Press. 46-63.
- TTnet workshop, (2001). "Professionalization of VET teachers for the future", Helsinki, 5-6 April 2001: synthesis report. Thessaloniki: Cedefop, http://www.trainingvillage.gr/etc/Upload/Projects_Networks/TTnet/workshopConferences/Workshop/Helsinki-Autere%20-%20synthesis%20EN.pdf

- Young,M. (2006). “FET college teachers: a knowledge-based profession of the future”,
Perspectives in Education. 24(3),153-160, 2006.
- Young M. and Gamble,J. (Eds), (2006).“Knowledge, Curriculum and Qualifications for
South African Further Education”, Cape Town: HSRC Press.
- Spencely, L.(2007). “Walking into a dark room – the initial impressions of learner-educators
in further education and training”, Journal of Further and Higher Education, 31:2, 87-
96.