Framing Quality TVET Lecturers: holistic competencies, TVET knowledge and mediation within the skills system

Abstract

TVET lecturing within TVET colleges is an educational process that includes teaching, learning, a curriculum, the learning relationship between students and teachers and daily decisions taken by TVET lecturers in response to contextual factors that affect student learning in local college settings. Beyond the TVET college there are increasing expectations about what TVET and thereby TVET lecturers can deliver in terms of transforming societies and domestic economies. Debates continue about the role of technical ability versus professional qualifications and the implications for supporting TVET lecturer quality. This requires a broader definition of 'quality' as it pertains to TVET lecturers and the complex internal and external contexts within which they exist. This paper presents three conceptual domains: TVET knowledge, holistic competencies and TVET lecturers as mediators in the skills ecosystem. These form the basis for a broader agentic and institutional understanding of TVET lecturer quality and underpin subsequent work in the Project 6.1. Following a preliminary analysis of definitions of 'quality' in academic literature we have designed a survey to understand perceptions of TVET lecturer quality as part of broader ongoing work to understand the evidence base for the broad framing of 'quality' outlined above.

If you are a TVET lecturer, a TVET student or an academic/civil servant with experience of TVET in South Africa please consider participating in this survey: Quality TVET Lecturers (Survey DHET)

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TVET lecturers in context

At the heart of TVET lecturing within TVET colleges is an educational process that includes teaching, learning, a curriculum, the learning relationship between students and teachers and daily decisions taken by TVET lecturers in response to contextual factors that affect student learning in local college settings. A TVET lecturer needs to face students as individuals, meet the needs of employers and the workplace, deal with the expectations of government and the local community, and hold all these factors in balance when working through a learning task with students. Debates continue about the role of technical ability versus professional qualifications and the implications for supporting TVET lecturer quality.

Beyond the TVET college there are increasing expectations about what TVET and thereby TVET lecturers can deliver in terms of transforming societies and domestic economies. Former South African president Kgalema Motlanthe stated in 2013 that "*Economic productivity is the fruit of long-term investment in the national education system. Short of an education system geared to the particular developmental needs of the country, we will be hard put breaking into high-level economic productivity that can extricate us from the inter-generational cycle of poverty*". This reflects a prevailing notion that the education system is a machine that can

produce people for the economy (Seyfried, 1977), and a core assumption that "proper" "quality" training and learning within TVET will make the economy work because VET will lead to some form of economically productive work-based activity. However, rapid changes in the nature of work linked to digitalisation and the loss of traditional forms of employment are fundamentally shifting where and how people work. Opportunities for individuals to move into "workplaces" are also shrinking as economies change. More importantly, the crisis of youth unemployment and TVET is starkly evident in South Africa and more widely in sub-Saharan Africa (Allais, 2020).

TVET lecturers exist and function as individual agentic actors within the internal educational and student learning processes of a TVET college and the wider socio-economic and institutional environment. In South Africa different progression pathways exist for TVET lecturers with the resultant possibility of differing dimensions of TVET lecturer quality. The project also recognises the complexity of the student base in South Africa. TVET students can range from young school leavers, older people seeking to re-skill, and individuals seeking to re-adjust in the face of extremely difficult socio-economic circumstances. In response Project 6.1 aims to develop an evidence-based understanding of the quality related aspects of the TVET lecturer role and complementary tools that support the identification, development and measurement of the various dimensions of TVET lecturer quality. This requires a broader definition of 'quality' as it pertains to TVET lecturers and the complex internal and external contexts within which they exist.

A broader definition of quality

In Project 6.1 we focus on 'quality' as it pertains to the individual TVET lecturer and their agentic capacity to support student learning and to gain and maintain the relevant knowledges and capacities within the broader institutional and TVET college contexts within which they reside. This is based on the understanding that a quality TVET lecturer needs to navigate three critical domains for quality student learning:

1. **TVET knowledge:** the TVET lecturer's ability and capacity to know practical skills and related foundational theoretical knowledge and concepts and pedagogy across contexts, and be able to shift as and when technologies and processes change and to equip their learners to do the same (Gamble, 2001; Guile, 2006; Young, 2006a; Wheelahan, 2015).
2. **Holistic competencies:** Moving beyond atomistic units of student competence and assessment to a broader conceptualisation of holistic competencies based on the integrated alignment of education and work and the social context within which work exists. For example, a bicycle mechanic that is able to find out which bicycle configuration might be most suitable for a customer when talking to them (Rauner, 2021, p. 2). This holistic approach recognises that attributes such as empathy and an ability to inspire and motivate students are an essential part of the TVET lecturer role, pointing to the range of dimensions that a TVET lecturer needs to build holistic competences in a student (Rauner, 2007; Mulder, 2017).
3. **Mediation within the skills ecosystem:** the TVET lecturer's ability and autonomy to understand and respond to policy priorities, curriculum design/requirements and work with local employers and other stakeholders (Russon and Wedekind, 2023).

Framing 'Quality' as it pertains to TVET lecturers

Vocational teaching is a surprisingly under-researched field in South Africa and Africa more broadly (Powell, 2013; Wedekind, 2016; McGrath et al., 2020). The limited research available focuses almost exclusively on teachers in formal public VET institutions, and generally suggests that they are poorly qualified, undervalued and need training. In South Africa vocational teacher programmes and qualifications often lag behind wider changes in the system and struggle to reach enough new or existing teachers (Papier, 2010; Muwaniki and Wedekind, 2019).

Blom (2016), Wedekind et al., (2016) and Buthelezi (2018) accept that there is a problem with TVET lecturers and vocational teaching in South Africa but root this in limited lecturer qualifications and occupational experience, and the wider, impossible challenges faced by vocational teachers. They note that few vocational teachers possess the perceived ideal triple package of significant industry experience, good academic qualifications and the sound pedagogical knowledge alluded to in policy documents. They also highlight the scale of the challenges faced, including major curriculum reforms and institutional mergers; a massive growth in enrolments, mainly consisting of younger learners with lower average prior attainment levels than previous VET cohorts; low salaries, morale and staff retention, and inadequate equipment and resources, in spite of recapitalisation efforts.

In response to these challenges recent work argued that recognition of the multiple identities TVET lecturers hold (e.g., artisan, teacher, counsellor, industry specialist) provides a useful reference point for thinking about a range of development pathways for TVET lecturer training and the coherent and coordinated approach required to manage this (Blom et al., 2022). At present in South Africa different progression pathways exist for TVET lecturers which raises the possibility of differing comparative dimensions of quality.

Research within the fields of education and TVET show that there is an important internal dynamic that focuses on what to teach, how to teach, and the type of teachers (and students) required to achieve certain educational outcomes. These internal factors all interact with and are shaped by institutional factors and policy at various levels of the TVET system, and the individual TVET lecturer resides within this space with varying degrees of agency and autonomy over what and how to teach and when. Consequently, a broader notion of TVET lecturer quality encompasses aspects of TVET lecturer knowledge, pedagogy and the curriculum, and the wider institutional and coordinating structures that enable or constrain a TVET lecturer's ability and capacity to understand and manage these aspects of their role. We conceptualise this as three domains that a 'quality' TVET lecturer needs to navigate in their teaching and learning engagements with students: TVET knowledge, holistic competencies and mediation within the skills ecosystem.

Holistic competencies and TVET knowledge

A critical debate within the TVET field over the past decade has been framed around the competencies that students need to develop to function effectively. Two key tensions have emerged that have implications for the quality of TVET lecturers, the curriculum structure and the nature of teaching, learning, qualifications, and assessment. The first relates to whether work can be broken down into discrete units of competence that can be identified, taught to students and assessed in isolation. Proponents of this approach point to tasks that make up a work process and suggest that these can be listed, the performance documented and assessed, and therefore these units can be separately certificated. This allows for smaller and

more time-manageable units of learning to be cumulatively built up leading to an occupational qualification. A drive towards industry-determined units of competency and assessment has been widely embraced by policymakers and embedded in the proliferation of qualifications frameworks (Allais, 2007; Buchanan, Anderson and Power, 2017). Competence Based Testing, Unit Standards and part-qualifications have been widely used within TVET in South Africa. TVET lecturers within this approach are viewed as facilitators and assessors, and students are regarded as the key agents in their own learning. Theoretically it matters little how one has developed the specific competence if one can demonstrate it. The advantages of such an approach are that multiple pathways of learning are open to the learner, and prior learning can easily be recognised and accredited.

The problem with this model of TVET, as articulated by its critics, is that it fails to recognise that work and occupations are more than a sum of a number of discrete part-processes and skills (Mulder, 2017). Knowledge underpinning the processes is not made explicit and consequently students can leave TVET with a limited understanding of what the task entails within the wider work context, limiting the ability to respond to changes in a work context. Proponents of holistic, shaping or 'gestaltkompetenz' argue that in order to teach someone (e.g., TVET students) to master a particular occupational role, they need to understand and identify with the whole occupation and develop their skills within this wider understanding (Rauner, 2007, 2021). Various models exist, but they point to a need to recognise that work is social, has environmental and aesthetic aspects, includes ethical considerations, and requires a range of dispositions and understandings that are context specific. Therefore, they argue, the component skills should be integrated and related to the occupation and the work process and should ultimately be assessed holistically rather than in discrete units. A core focus is the development of an occupational identity that goes beyond competence in specific tasks.

Central to the concept of TVET knowledge is the relationship between particular forms of knowledge and its pedagogy across contexts, and the ways in which different forms of knowledge affect practice (Guile, 2006; Gamble, 2013). A narrow approach to TVET based on learning outcomes and task-specific skills lacks depth, and does not allow for the systematic application of theoretical knowledge to the practice and the development of expertise in the workplace (Winch, Sahin-Dikmen and Clarke, 2020). In contrast, a theoretically broader, deeper, more technical and interdisciplinary expertise is associated with the ability to link theoretical considerations to specific applications in various occupational contexts and a more holistic understanding of occupational processes (Barnett, 2006; Guile, 2006; Young, 2006a; Billett, 2020; Winch et al., 2020).

Critics who focus on questions of knowledge argue against a discrete competence-based approach on three levels. Firstly, in order to equip students for a life-long and life-wide engagement with work, TVET programmes and TVET lecturers have to engage with the foundational knowledge that underpins occupations and ensure that they are able to learn and adapt in response to this knowledge as society and technology changes (Guile, 2006; Young, 2006b; Gamble, 2013). They therefore argue for the inclusion of core knowledge within the curriculum, such as science and mathematics for technical subjects (Winch, 2013). Secondly, a wider understanding of the social world within which the work takes place is a necessary part of any occupation and therefore knowledge about being a citizen of the society and the community of practitioners is something that should be taught to TVET students (Gamble, 2013). Thirdly, theorists of knowledge recognise that many aspects of work processes cannot be codified and taught formally, and so opportunities for learning the tacit and embodied

knowledge need to be created before a student is able to identify themselves in the occupation (Gamble, 2001; Guile and Griffiths, 2001; Guile, 2006). These knowledge and holistic competence approaches all stress the need for systematic curriculum, time spent learning and practicing and strong connections between the field of learning and the field of practice.

The role of TVET lecturers is understood quite differently in the holistic and knowledge-based approach. In the competence-based training approach the role of a TVET lecturer is reduced to that of a trainer and assessor able to teach discrete skills but negating their expertise. In contrast a holistic TVET lecturer has a Janus-faced identity, facing both the world of work and the world of students and TVET education and knowledge. In this context a quality TVET lecturer needs to bridge the gap between theoretical, workplace and everyday knowledge, have an understanding of educational processes and learning theories and approaches, whilst aiding learners to understand and access the knowledge that underpins the field (Barnett, 2006; Young, 2006a). This is an extremely complex and highly skilled role, that is recognised in some policy but seldom in the practice of recognising and valuing TVET lecturers.

Mediation within the skills ecosystem

The skills ecosystem concept as developed by Hodgson and Spours recognises that economic activity and its associated skills needs are embedded within wider social, spatial and ecological contexts and envisages a relationship between working living and learning (Spours, 2019). Thus, it draws attention to the regional and sectoral TVET contexts within which skills are developed (Buchanan, Anderson and Power, 2017; Wedekind *et al.*, 2021). Three key dimensions form the foundation of the skills ecosystem concept:

- Facilitating verticalities: the policies and actors that are intended to support working living and learning (e.g. national and regional TVET policies and funding bodies);
- Collaborative horizontalities: networks between various actors at the local level (e.g. TVET institutions and employers);
- Mediation: the individuals and organisations that provide points of connection between these two dimensions (Hodgson and Spours, 2016; Grainger and Spours, 2018; Spours, 2019).

The knowledge and competencies debates show that TVET lecturers need to have expertise as educationists and mastery of their field of work, but from a skills ecosystem perspective Russon and Wedekind (2023) argued that TVET lecturers are also mediators: an invisible connection point, right at the centre of the skills ecosystem. TVET lecturers also need to be able to understand vertical signals and interpret these for students, mediate this process and link this to day-to-day practices in collaboration with other actors on the horizontal dimension. However, recent research in South Africa and Uganda showed that the formal logics of curriculum, teaching institutions and educational systems can act as constraints, making it difficult for TVET lecturers to play that role (Russon and Wedekind, forthcoming). For example, in South Africa it was observed that top-down policy interventions can redirect TVET resources to flagship projects and TVET institutions or promote TVET courses for skills and sectors that do not currently exist. This creates challenges for TVET lecturers. However, Russon and Wedekind (forthcoming) also observed that TVET lecturers were able to work most effectively where they were not too tightly constrained by formal education requirements and were able to adapt and design curriculum and learning processes through collaborative processes. This highlights the importance of autonomy and agentic capacity when considering the issue of TVET lecturer quality.

These three conceptual domains of TVET knowledge, holistic competencies and TVET lecturers as mediators in the skills ecosystem form the basis for a broader agentic and institutional understanding of TVET lecturer quality. This framing underpins subsequent work in the Project 6.1 to develop an evidence-based framework and toolkit for TVET lecturers that promotes the identification, development and measurement of quality related aspects of the TVET lecturer role.

Surveying perceptions of TVET lecturer quality

Project 6.1 began by expanding our understanding on definitions of quality in the literature and the evidence base for the broad framing outlined above. Following a preliminary analysis of the literature we have designed a survey to understand perceptions of TVET lecturer quality. We recognise that key actors within the system (TVET institutions, the private sector and government) may hold differing expectations of quality as it pertains to TVET lecturers, therefore the survey seeks to understand how 'quality' is perceived and defined across a wide range of stakeholders.

The survey uses a series of statements (derived from the literature), reflecting a broad framing of 'quality' as it pertains to quality in TVET lecturers, encapsulating aspects of TVET pedagogy, and issues such as policy, curriculum, infrastructure and resources that can all have a bearing on TVET lecturer quality.

We close with an invitation to participate in the survey if you have experience of TVET in South Africa: Quality TVET Lecturers (Survey DHET).

INVITATION

Survey: Quality TVET Lecturers - South Africa

Are you a TVET lecturer, a TVET student or an academic/civil servant with experience of TVET in South Africa? If yes, please consider participating in this short anonymous survey on quality TVET lecturers.

Quality TVET Lecturers (Survey DHET)

This survey is being conducted by the University of Nottingham (UK) as part of the Department of Higher Education and Training (DHET) South Africa, TVET Research Programme.
Further details are provided in the survey introduction, but if you would like further information please contact Dr Jo-Anna Russon (Jo-Anna.Russon@nottingham.ac.uk).
The survey closes on Thursday 19th January 2023.

Please feel free to forward the survey link to others who may be interested in participating, particularly TVET students, industry, TVET lecturers, and academics/policy writers and civil servants involved in TVET.

With thanks
Jo-Anna Russon and Volker Wedekind,
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