

Assessment Policies in VET

Wicked Problems and Conflicting Expectations

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Abstract

Assessment in vocational education and training (VET) is a relatively unexplored theme in assessment research. The assessment roles and responsibilities of VET teachers are challenging to codify in educational policies, leading to policymaking processes where social issues cannot be solved in an efficient or definitive manner. This study uses thematic analysis (Clarke & Braun, 2017) to investigate the expectations for VET teachers in Norwegian policy documents. In order to understand the dilemmas inherent in VET assessment policies, we draw on two bodies of knowledge: a) research on teacher assessment literacy and b) the concept of wicked problems (Rittel & Webber, 1973). The research question guiding this study is: How do national policies frame the expectations for VET teachers' assessments? We identified five frames in the policy documents. VET teachers are expected to 1) negotiate legal requirements, 2) educate young people for social participation, 3) use assessment to support learning and motivation, 4) qualify a workforce for the future, and 5) become VET teachers. We discuss how conflicting expectations for VET teacher assessment may lead to a fragmentation of assessment responsibilities, threaten validity in assessment, and raise the question of what constitutes appropriate content in professional development.

Keywords: VET teachers, assessment, policy, wicked problems

Introduction

Assessment in vocational education and training (VET) is a relatively unexplored theme in assessment research (Castellano et al., 2003; Grollmann, 2008; Guthrie & Every, 2013). Although there is considerable collaboration between education institutions and businesses in the training of young people (e.g., mentoring, work-based learning, and apprenticeships), the impact of such efforts is rarely measured (AIR UK & National Centre for Social Research, 2008; Mann et al., 2014). In several countries, there is a lack of standards and terminology describing the necessary qualifications to teach and assess students in VET contexts (Rasmussen, 2016). This leads to considerable variance in the management of assessment responsibilities across systems.

The assessment roles and responsibilities of VET teachers are challenging to codify in educational policies, leading to policymaking processes where social issues cannot be solved in an efficient or definitive manner. For example, VET policies typically struggle to negotiate demands from both school and work contexts and expect VET teachers to bridge the gaps between learning and assessment traditions in educational and vocational sectors (Farnsworth & Higham, 2012; Köpsén, 2014; Robson et al., 2004). Consequently, policymakers' rhetoric in the VET sector is often ambiguous, comprising tensions between supporting teacher and learner agency while governing through bureaucratic micromanagement, or between a broad vision of promoting active citizenship and narrow conceptualisations of skills as beneficial for national economic performance (Finlay et al., 2007). Assessment policies in VET therefore remain elusive and ill-defined.

This study uses thematic analysis (Clarke & Braun, 2017) to investigate the expectations for VET teachers in Norwegian policy documents. In order to understand the dilemmas inherent in VET assessment policies, we draw on two bodies of knowledge: a) research on teacher assessment literacy and b) the concept of wicked problems (Rittel & Webber, 1973). The research question guiding this study is: How do national policies frame the expectations for VET teachers' assessments?

Assessment in VET

Teacher assessment literacy refers to the interrelated sets of knowledge, skills, and dispositions used by teachers to design assessment activities, interpret evidence of student learning, and provide feedback to students (Pastore & Andrade, 2019; Xu & Brown, 2016). Despite several attempts at conceptualising the nature of teacher assessment literacy (Popham, 2017; Stiggins, 1995; Xu & Brown, 2016) and the introduction of standards and measures, the construct is now understood as a practice moored in sociocultural contexts that requires teachers to negotiate and enact their assessment knowledge in classroom contexts (DeLuca et al., 2016). Teacher assessment practice is therefore affected by both individual cognitive and affective factors, as well as sociocultural and institutional contexts (Coombs et al., 2018; DeLuca, 2012; DeLuca et al., 2019; Shepard, 2000).

VET teachers' assessment literacy is anchored in their particular vocations (Farnsworth & Higham, 2012; Robson et al., 2004; Sarastuen, 2020). Vocational traditions are often tacitly acquired through participation in communities of practice where novices learn from experts, rather than institutionalised cycles of teaching and testing individuals (Dreyfus & Dreyfus, 1986; Wenger,

1998). Tacit knowledge has an elusive character, can only be seen in action (Polanyi, 1966), and cannot necessarily be explained (Ryle, 1963). Furthermore, VET is highly context dependent, and learning and assessment typically take place in authentic settings. Vocational subjects therefore advocate tacit, practical, and experience-based traditions for learning and assessment (Dreyfus & Dreyfus, 1986; Lave & Wenger, 1991; Sennett, 2008).

At the macro level, VET policies grapple with wicked problems, such as skill shortages, school management, and workplace reforms (Garrick, 2011). Locally, it is challenging for VET teachers to negotiate the fundamental differences between school and work (Farnsworth & Higham, 2012; Köpsén, 2014; Robson et al., 2004). Problems related to the assessment of VET students' vocational competence in the formal school context can be particularly challenging due to tensions between policy demands and vocational realities. Furthermore, it is challenging to assess students' practical competence in a valid way using written standards, since verbal language cannot describe the tacit elements of practical skills (Gills & Bateman, 1999; Lewkowicz, 2001; Newton & Baird, 2016). There is currently a lack of studies regarding the role of tacit knowledge in influencing teachers' conceptions of assessment (Xu & Brown, 2016).

Wicked Problems

The concept of 'wicked problems' refers to a unique problem or idea in social policy without a definite formulation (Rittel & Webber, 1973). In their seminal paper on wicked problems in policy analysis, Rittel and Webber (1973) suggested that many societal issues were essentially unique, and that proposed solutions to wicked problems generated waves of consequences over an extended period of time after their implementation. Policymakers must grapple with complex socioeconomic challenges without straightforward solutions (Ball, 1993; Falk, 1994; Taylor, 1997) and draw on specific ideologies, power relations, and world views (Ball, 1993; Burr, 1995; Phillips & Hardy, 2002) to tactically promote or subdue particular interests, subject positions, or power dynamics. Policy documents cover up inequitable taken-for-granted systems or dissociate from problems created by the policy itself (Anderson & Holloway, 2020; Phillips & Hardy, 2002). Wicked problems therefore resist straightforward solutions and have no right or wrong answers (Conklin, 2005; Head & Alford, 2015).

A range of strategies for dealing with wicked problems in policymaking have been suggested. Roberts (2000) argues that policy planning must negotiate between authoritative (few stakeholders involved, few competing points of view), competitive (dissenting parties promote opposing points of view), and collaborative (a number of stakeholders discussing ideas) strategies to cope with such problems. Nevertheless, one wicked problem can often be a symptom of another, and solving one aspect of the problem might reveal others, making it difficult to handle complex political and socioeconomic challenges (Rittel & Webber, 1973). Rittel and Webber (1973) therefore underlined that every attempt at solutions counts and that policymakers must accept responsibility for the consequences of their attempted solutions.

Our claim in this paper is that assessment in VET is characterised by a range of wicked problems. We contend that policymakers frame expectations for assessment in VET in multiple and ambigu-

ous ways, leading to a challenging situation where teachers must negotiate a set of conflicting demands. These demands include pushing assessment decision-making responsibilities downwards, handling potential threats to the validity of assessment, and deciding what constitutes appropriate content in professional development offerings for VET teachers.

Background and Context

Governance in the Norwegian education system is generally decentralised (Antikainen, 2006, 2016; Telhaug et al., 2006; Tveit, 2014). Schools follow national regulations, frameworks, and curricula, with some possibilities for local adjustments (Hopfenbeck et al., 2013; Nusche et al., 2011). More than 90% of students attend post-16 education (Statistics Norway, 2019), and more than 50% choose a VET programme (Utdanningsdirektoratet, 2018; Statistics Norway, 2019).

In Norway, VET is considered equal to general academic education. Both fields draw on a broad vision of education (e.g., welfare, social participation, lifelong learning, and personal growth) and follow the same regulations for learning and assessment, except for subject-specific curricula (Hilt et al., 2019; Hopfenbeck et al., 2013; Nusche et al., 2011). Nevertheless, VET subject curricula have taken on the characteristics associated with more traditional academic education (Smeby & Sutphen, 2015). This process, often referred to as ‘academic drift’ in VET curricula (Edwards & Miller, 2008), also affects the assessment of vocational competence and may create tensions between the academic and vocational traditions of learning and assessment.

VET usually involves two years of schooling, two years of workplace training, and a final trade or journeyman’s exam (Utdanningsdirektoratet, 2018). VET consists of both vocational and academic subjects, including Norwegian, English, mathematics, science, social science, and physical education. The students must pass both vocational and academic subjects to qualify for apprenticeships and trade exams. VET students can also choose to undertake an additional year of supplementary studies to qualify for entry into higher education.

VET teachers in Norway are required to have both vocational education (a trade or journeyman’s certificate, relevant experience, or a diploma from upper secondary school) and teacher education (minimum one year practical-pedagogical education, preferably a bachelor’s or master’s degree). However, many vocational workers practice teaching without a formal teacher education (Aspøy et al., 2017; Kunnskapsdepartementet, 2015).

An important feature of assessment policies in the Norwegian education system is the considerable trust placed in teachers’ professional judgement (Hopfenbeck et al., 2013). VET teachers are responsible for providing both formative assessment (e.g., communicating feedback and encouragement) and high-stakes summative assessments (assigning final grades for the diploma). In order to equip teachers with the skills needed for this complex role, the Ministry of Education and Research (MER) and the Department of Education and Training (DET) have implemented a range of professional development initiatives.

Research Design

Investigating policy documents describing the aims, content, organisation, and governance of the educational sector, such as regulations, curriculum, political initiatives, and development strategies, can be valuable in determining policy ideas (Ball, 1993; Taylor, 1997; Yeatman, 1990). Drawing on thematic analysis (Braun & Clarke, 2006), this study explores how expectations for VET teachers' assessments are framed in national policies and how the tensions between these framings impact VET teachers.

Data Material

The data material consists of five Norwegian policy documents (see Table 1 and 2). First, we selected the Norwegian AfL initiative (2014–2017), (Utdanningsdirektoratet, 2014) as our point of departure. Second, we identified policy papers describing AfL in an upper secondary context. Third, we selected papers outlining policies and suggestions for assessment in VET specifically.

Table 1. Document names and references

References cited:	Norwegian titles:	English titles and abbreviations used in text:
Forskrift om rammeplan for yrkesfaglærerutdanning (2013)	Forskrift om rammeplan for yrkesfaglærerutdanning for trinn 8–13	Regulation on The Framework Plan for Vocational and training teacher education for 9-13 grade Short: Regulation for VET teacher education
Forskrift til opplæringslova (2009)	Kapittel 3. Individuell vurdering i grunnskolen og i vidaregåande opplæring	Individual assessment in primary school and in upper secondary education Short: Individual assessment
Kunnskapsdepartementet, (2015)	Yrkesfaglærerløftet. Strategi for fremtidens fagarbeidere	VET teacher knowledge promotion initiative. A strategy for further vocational workers. Short: VET teacher promotion initiative
Kunnskapsdepartementet (2017)	Verdier og prinsipper for grunnopplæringen	The Quality Framework
Utdanningsdirektoratet (2014)	Grunnlagsdokument - Videreføring av satsningen Vurdering for læring 2014-2017	Foundation document - Continuing the Assessment for learning initiative 2014-2017 Short: Assessment for Learning

Table 1 shows which documents we have chosen, their full names in Norwegian and English (our translation) and references. We have abbreviated some of the names. We use these abbreviations throughout the rest of the text. Table 2 provides more detail on the data material.

Table 2. Description of Data Material

Abbreviated name and reference	Producer and recipients	Policy genre, status, and context	Content and purpose
Individual assessment Forskrift til opplæringslova (2009)	The text is produced by MER on behalf of the Norwegian Parliament. It addresses primary and secondary school owners and management, vocational sectors, training establishments, examination boards, teachers, students, instructors in businesses, and parents/guardians.	The document is part of <i>The Education Act</i> , which is the superior legal document for education in Norway.	The document presents guidelines for formative and summative assessment, describes students' rights for assessment, and places assessment responsibilities within the education system.
The Quality Framework Kunnskapsdepartementet (2017)	The text is produced by DET on behalf on MER. It addresses primary and secondary school owners and management, teachers, students, and parents/guardians.	The text has legal status as a law and is shaped as an overall curriculum. The document is part of <i>The Core Curriculum</i> , which presents the overarching goals for education in Norway.	The document presents the values and ethical guidelines for the Norwegian education system. It also describes learning outcomes for how young people can become democratic, well-functioning citizens who can participate and contribute in a welfare society.
Assessment for Learning Utdanningsdirektoratet (2014)	The text is produced by a research team led by DET on behalf on MER. It addresses lower and upper secondary school owners, school management, and teachers.	The text has status as a political initiative. The document is a knowledge foundation referring to international research and reports claiming an urgent need for better formative assessment practices.	The document presents strategies for how to develop better assessment practices in school and strengthen teachers' assessment literacy.
VET teacher Promotion Initiative Kunnskapsdepartementet (2015)	The text is produced by DET and MER on behalf of the Norwegian Parliament. It addresses VET teacher education, lower and upper secondary school owners and management, vocational sectors, training establishments, examination boards, VET teachers and students, and instructors in businesses.	The text has status as a political initiative. The document is based on the government's strategy to strengthen VET and ensure that more students graduate and become vocational workers.	The document presents strategies for how to recruit new VET teachers in order to qualify a competent workforce for the future and compete in the global vocational market.
Regulation for VET teacher education Forskrift om rammeplan for yrkesfaglærerutdanning (2013)	The text is developed by MER and addresses VET teacher education, lower and upper secondary school owners and management, vocational sectors, training establishments, examination boards, VET teachers and students, and instructors in businesses.	The text has legal status as a law and is shaped as a curriculum for VET teacher education. The document's legal base is <i>The Act Relating to Universities and University Colleges</i> (01/04/2005, no. 15 § 3–2).	The document presents the knowledge, skills, and general competencies a vocational worker must gain to become a VET teacher.

Thematic Analysis

Thematic analysis (TA) is a flexible approach to qualitative analysis. TA provides systematic procedures for generating codes (the smallest units of analysis that capture the data potentially relevant to a research question) and themes (the patterns of meaning underpinning core ideas) from qualitative data (Braun & Clarke, 2006).

TA can be applied across a range of theoretical frameworks and paradigms. Our analysis adopts a reflexive and critical stance (Braun & Clarke, 2021a) to investigate the patterns of meaning in the ‘themes’ of the texts (Braun & Clarke, 2006, 2017). We consider the language of policy texts as creating (and not simply reflecting) reality; this enables us to interrogate patterns of meaning through an interpretative process (Terry et al., 2017). We therefore view researcher subjectivity as integral to the process of analysis (Terry et al., 2017) and emphasise conceptual development and theoretical depth rather than measures of intercoder reliability as criteria for validity (Braun & Clarke, 2021b).

Our analysis follows Braun and Clarke’s (2006) six-step model for TA to identify, analyse, and report how the selected policy documents frame, contextualise, and legitimise their expectations for VET teachers as assessors. The model consists of six phases: 1) familiarisation with the data, 2) generating initial codes, 3) searching for themes, 4) reviewing themes, 5) defining and naming themes, and 6) producing the report.

First, we read and re-read the documents to familiarise ourselves with the data and to look for patterns of meaning and issues of potential interest (Braun & Clarke, 2006). This search for patterns started during the data collection and continued throughout the whole analysis process, as we continually moved back and forth between the data, codes, and themes. We wrote down ideas and developed potential coding schemes from the very beginning. Writing is, according to Braun and Clarke (2006, p. 86), an essential part of the analysis process and should be integrated from the first step of the analysis.

Second, we produced initial codes to identify the interesting features in the documents. An initial code refers to ‘the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon’ (Boyatzis, 1998, p. 63). Table 3 shows an example of how we coded the data extracts during this second phase, focusing on the expectations of VET teachers as assessors.

Table 3. Data Extract with Codes Applied (inspired by Clarke et al., 2008).

Data extract	Coded as
<p>The phenomenon ‘assessment for learning’ refers to how information about students’ competence and development can be used to give direction for planning and implementation of the training. This requires teachers to systematically collect, analyse, and use assessment information about students for the purpose of viewing:</p> <ul style="list-style-type: none"> - Where they are in their learning; - Where they are going; and - How they can best achieve their goals. <p><i>Assessment for Learning</i> (Utdanningsdirektoratet, 2014, p. 3)</p>	<p>VET teachers are expected to know:</p> <ol style="list-style-type: none"> 1. How to define competence. 2. How to collect evidence on competence. 3. How to use evidence to adapt learning. 4. How to use evidence to promote learning. 5. How to give constructive feedback. <p>Summarised: VET teachers are expected to be assessment literate.</p>

In this second step, we focused on coding the data referring to VET teachers' knowledge and conceptions of assessment, assessment practices, and assessment responsibilities, both to limit the study and to relate the data to the research question. We also added some context information to the codes, as coding is often criticised for losing context (Braun & Clarke, 2006). All the codes were added to a table. The coding was mainly 'data-driven' and not shaped by theoretical constructs.

To construct the themes, we considered how combinations of codes might form overarching themes. Codes such as 'grade students,' 'qualify workers,' 'educate democratic citizens,' and 'prepare young people for adulthood' were merged into a theme called *assessment responsibilities*. Codes such as 'support students,' 'safeguard stakeholder interests', and 'interpret and operationalise guiding framework' were merged into a theme called *assessor positions*. We then interrogated the themes to identify particular ideologies, power relations, or world views in the data. These features led to the conceptualisation of five framings in the data material (see Table 4). All framings are present in all documents, but each text has one prominent frame.

Table 4. Policy Framings

Document name	Expectations for VET teachers as assessors	Ideology, power relations, and world views	Policy framing
Individual assessment Forskrift til opplæringslova (2009)	VET teachers are expected to interpret and operationalise formal guidelines and frameworks for assessment both to safeguard quality standards in education and to adapt assessment to meet students' individual needs.	The text's intention is to set formal rules and legalistic requirements for formative and summative assessment, ensure equal rights for students, and distribute assessment responsibilities.	Negotiating legal requirements
The Quality Framework Kunnskapsdepartementet (2017)	VET teachers are expected to teach students sociodemocratic values, core competencies, and basic skills to prepare them for adulthood, social life, and employment.	The text's intention is to educate young people to fit into a socio-democratic society founded on human-ethic values and give them the tools (e.g., ability to learn, critical thinking, social skills) to master their personal, social, and professional lives.	Educating young people for social participation
Assessment for Learning Utdanningsdirektoratet (2014)	VET teachers are expected to know how to use assessment to collect evidence and adapt and improve learning.	The text's intention is to strengthen both collective and individual assessment practices and literacy in school to improve students' motivation and learning.	Using assessment to support learning and motivation
The Vocational Teacher Promotion Initiative Kunnskapsdepartementet (2015)	VET teachers are expected to qualify competent vocational workers, ensure quality in VET to meet global demands, recruit VET students, and prepare students for employment in vocational sectors undergoing change.	The text's intention is to ensure the production of workers who can maintain and develop the Norwegian welfare society, compete in the global market, and ensure economic growth.	Qualifying a workforce for the future
Regulation for VET Teacher Education Forskrift om rammeplan for yrkesfaglærer-utdanning (2013)	VET teachers are expected to change from vocational workers to professional teachers by developing particular knowledge, skills, and general competence through VET teacher education.	The text's intention is to ensure that vocational workers become professional teachers who can contribute to developing VET and ensure quality in all aspects of education.	Becoming a VET teacher

In the fourth step, we reviewed all the codes describing the policy expectations for VET teachers as assessors through the five ‘frames’ identified in step three. Some codes were deleted (not enough data, diverse data, or not relevant for the research question), while others collapsed into each other, which is normal in this part of the analysis process (Braun & Clarke, 2006, p. 91). In the fifth step, we decided to use the five policy framings as themes. In the sixth and final step, we investigated how each of the policy framings reinforced particular policy expectations for VET teachers as assessors. To ensure validity, we made sure that the final analysis provided a concise and coherent account of the data (Braun & Clarke, 2006, p. 93). We identified five frames in the policy documents. VET teachers are expected to 1) negotiate legal requirements, 2) educate young people for social participation, 3) use assessment to support learning and motivation, 4) qualify a workforce for the future, and 5) become a VET teacher.

Findings

Negotiating Legal Requirements

Our first finding was that VET teachers are required to negotiate complex legal requirements. Student rights are secured through legal means in the Norwegian assessment system, typically through requiring different forms of documentation. For example, *Individual assessment* states that ‘students, apprentices, apprentice candidates and trainee candidates have the right to mid-term assessment, final assessment and documentation of the education and training’ (*Individual assessment* § 3–2). Simultaneously, VET teachers are required to collect evidence of students’ learning for grading purposes. This system holds individual teachers accountable to principals.

The subject teacher sets students’ final grades. If the principal is in doubt as to whether the rules for determining a final grade have been followed, the principal may demand that the subject teacher make a new assessment before the grades are determined and entered. (*Individual assessment* § 3–15)

Furthermore, VET teachers must cooperate with businesses to ensure that VET students receive practical training.

A successful vocational training requires good coherence and close contact between vocational sectors and schools throughout the entire educational process. Among other things, students must have practice in apprenticeships through the subject vocational specialisation. VET teachers must therefore be able to plan, enable and follow up agreements with local businesses. (*The VET Teacher Knowledge Promotion Initiative*, p. 13)

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As expected, this finding corresponds with a problem often noted in the VET literature: policy-makers frame expectations ambiguously, offering agency on the one hand and governing through

bureaucratic micromanagement on the other (Finlay et al., 2007). VET teachers are consequently tasked with negotiating a complex set of legal requirements.

Educating Young People for Social Participation

Our second finding relates to the purposes of VET and schooling in general. Several documents, and *The Quality Framework* in particular, expect VET teachers to educate and prepare young people for social participation. It states, ‘The education shall promote support for democratic values and democracy as a form of government. It should give students an understanding of the rules of democracy and the importance of upholding them.’

The Quality Framework (p. 7) suggests that teachers are responsible for teaching students the social and personal skills necessary to successfully participate in school, social life, and work. This particular frame manifests itself in policy descriptions of broadly defined educational goals and visions and corresponds with the cultural norms and values necessary in the Norwegian welfare society. This finding underpins the importance of VET teachers having broad knowledge of Norwegian economy, politics, history, and culture, and the ability to apply this knowledge in teaching and assessment. However, the role of teachers’ personal beliefs and their potential impact on teaching and assessment are not considered.

In the context of assessment, this policy expectation implies that VET teachers have an assessment responsibility beyond certifying students’ vocational skills.

The education shall ensure that the candidates can contribute to the development of the school as an institution for learning and education in a democratic society. The education shall take care of different perspectives related to gender equality and the multicultural society, and create an understanding of a school that is inclusive for all students, regardless of their prerequisites and social, cultural and linguistic background. (*Regulation for VET Teacher Education*, §2)

The frame ‘preparing students for social participation’ sets expectations for VET teachers’ abilities to adapt their assessments, particularly for students with challenges (e.g., learning disabilities or social or personal challenges) to support both learning and personal development.

Three student groups place special demands on the competence of the VET teacher: students with weak academic prerequisites for completing upper secondary education, students with decisions on adapted, special education, and students with weak Norwegian language skills and short residence in Norway. (*The VET Teacher Knowledge Promotion Initiative*, p. 15)

Finally, this expectation implies that VET teachers must be able to provide suitable education for all students regardless of their abilities for learning, for example, through collaboration with local businesses. Given the complexity of developing an identity as an assessor, as well as the paucity of assessment methods for students’ tacit knowledge and practical skills in VET, this policy expectation indicates a conflict between competing purposes in education.

VET teachers’ main purpose is to provide qualifications in the post-16 system so that young people can find employment. However, social competencies, such as the ability to care for or cooperate with others, are not graded and therefore not rightfully acknowledged in students’ diplomas. Still, the curriculum requires VET teachers to fulfil these competing purposes. We view this finding as an example of a wicked problem caused by policy itself: while policymakers attempt to solve

complex social problems through discourse by establishing the aims and purposes of VET education, this discourse-driven approach also creates new challenges when policies collide.

Using Assessment to Support Learning and Motivation

The third finding relates to the introduction of formative assessment as a component in the VET assessment system. The *Assessment for Learning* strategy expects VET teachers to use assessment to support learning and motivation among students. ‘Assessment for learning is about teachers using information about students’ competence to adjust teaching and adapt learning. Teachers must collect, analyse, and use evidence on students’ learning to assess status in learning, what to learn next and how to get there’ (*Assessment for Learning*, p. 3). This statement refers to how teachers are expected to use their knowledge about assessment to ensure learning among a diverse group of students. However, the initiative does not take into account the specifics of the vocational subjects or the professional knowledge of the vocational teachers. Rather, the framing is anchored in national and international research (Black & William, 1998; Gardner et al., 2010; Hattie, 2009; Hattie & Timperley, 2007; Hutchinson & Hayward, 2005) and reports (Nusche et al., 2011; OECD, 2008), suggesting an urgent need for development of a learning-focused assessment culture in school to ensure that students become motivated and learn more.

It is expected that VET teachers’ assessment literacy should include practices that support and motivate VET students, and that teachers must be able to further develop their assessment literacy so that the needs of their students are served at school and work.

The candidates must be able to analyse their own need for professional development and have the ability to change and improve their own competence to meet the future needs in school, work and society. (*Regulation for VET Teacher Education*, § 2)

However, none of the documents define what it means to be an assessment literate VET teacher. The importance of context in the assessment of vocational learning is not discussed, and the idea that assessment literacy should be an integrated part of VET teachers’ professional competence is not elaborated upon. Consequently, VET policies present assessment literacy as a complex theoretical concept but leave the interpretation and practical application of the concept to schools and teachers. This adds to the existing burden of negotiating the fundamental differences between learning in school and learning through practical work and experience already characterising VET. Making sense of the tacit nature of learning and assessment in VET is left entirely to teachers. Considering the dearth of research on the role of tacit knowledge in teachers’ conceptions of assessment (Xu & Brown, 2016), it is likely that policies that require teachers to engage in formative assessment may be challenging to implement.

Qualifying a Workforce for the Future

The fourth finding was related to the well-known issues of managing potential skill shortages and maintaining a skilled workforce at the macro level. For example, *The VET Teacher Knowledge Promotion Initiative* expects VET teachers to prepare a workforce for the future.

Professionally strong, committed, and dedicated VET teachers are an important contribution to ensuring that we have the skilled workers we need to build the Norway of the future. (p. 5)

The goal of our initiative is to collaborate with vocational sectors to educate more skilled workers and to ensure that more VET students complete and pass their education and training. (*The VET Teacher Knowledge Promotion Initiative*, p. 5)

Such statements connect VET teachers' assessment practices to the maintenance and development of the Norwegian welfare state. This framing reinforces the qualification of vocational workers as the main purpose of VET by referring to the nation's common needs for a competent, educated workforce to sustain and develop the Norwegian welfare society and compete in the global market.

Furthermore, students are expected to be involved in assessment by assessing their own learning and to change and develop according to the need for vocational competence in the global market.

Through self-assessment and involvement in the assessment work, students are trained in developing awareness of their own learning processes, which is necessary to be able to develop self-regulated learning. (*Assessment for Learning*, p. 3)

VET teachers are therefore rhetorically framed as the custodians of a future of economic and social wealth. This framing positions VET teachers as key components in a complex economic system characterised by global competition. Assessment serves as a critical device in that high-quality assessments and teachers with advanced assessment literacy are required to ensure the competitiveness and prosperity of the economy. Conversely, the diversity of students currently in education and their varied needs are not considered. The challenges VET teachers face when adapting learning and assessment to support diverse students through school and into their work life are not considered. Contextual aspects with a potential impact on student learning outcomes (e.g., number of students, time, equipment, or teachers' professional competence) are not discussed. This illustrates the difficulty policymakers face when developing strategies for both the macro and micro levels of VET and suggests that it is easier to push such responsibilities downwards to the VET teachers.

Becoming a VET Teacher

The fifth and final finding was related to the education and recruitment of VET teachers. In the Norwegian context, policymakers expect vocational workers to become VET teachers by acquiring both the vocational and pedagogical knowledge required. This expectation is evidenced by a statement made by the former Minister of Education and Research Torbjørn Røe Isaksen in the *VET Teacher Knowledge Promotion Initiative* policy document: 'The VET teachers who qualify workers for the future must have both a wise head and skilled hands. They need both theoretical and practical expertise' (*The VET Teacher Knowledge Promotion Initiative*, p. 5). Becoming a VET teacher is thus framed as a process of developing pedagogical judgement and practical skills.

Learning how to assess students' learning in VET is similarly described as a negotiation between vocational traditions and pedagogical issues.

VET teachers must be able to plan, justify, implement, lead, assess and document relevant vocational training adapted to the students'/apprentices' needs, and be able to assess and document students' learning and development, provide learning-focused feedback and help students/apprentices to reflect on their own learning. (*Regulation for VET Teacher Education*, § 2)

This passage suggests a complex role for VET teachers, comprising the orchestration of formative and summative assessment, providing feedback, and organising self-assessment practices. The ambitious political goal of unifying vocational backgrounds with teacher education could be interpreted as an attempt at addressing a problem in the Norwegian context: VET teachers typically lack either formal teacher education or vocational experience (Aspøy et al., 2017).

Unfortunately, beyond explicating overarching strategic ambitions and suggesting the development of shared assessment practices and professional development initiatives, there are few specific guidelines available for teachers. Moreover, VET teachers must be able to operationalise multiple terms and concepts with many possible interpretations, each with different consequences for students' learning. Competence, for example, is a multiple concept without clear definitions in policy.

Competence is the ability to acquire and apply knowledge and skills to master challenges and solve tasks in known and unknown contexts and situations. Competence involves understanding and the ability to reflect and think critically. (*The Quality Framework*, p. 9)

The lack of guidelines for assessment and definitions of key concepts suggest that the requirements for becoming a VET teacher are challenging. Framing the process of becoming a VET teacher through qualifying both in vocational and pedagogical paths places responsibilities on the individual teacher rather than at the system level.

Discussion

Understanding how policy documents frame expectations for VET teachers can enhance the role of standards and terminology in VET policies. The research questions guiding this study were: *How do national policies frame the expectations for VET teachers' assessments?* We found that policymakers, in attempting to address wicked problems related to education, work, and welfare, create conflicting expectations for VET teachers' assessment.

First, conflicting expectations for VET teachers' assessment practice lead to a fragmentation of assessment responsibilities. Although the policies state that school owners and the school management hold the main responsibility for assessment, there are few guidelines for practice, and many key assessment decisions, such as assessment design and the collection and interpretation of evidence of student learning, are made by teachers themselves. While this signifies high trust in teachers' professional judgement, it also means that teachers are held accountable for securing validity in assessment. Effectively, policymakers push assessment decision-making responsibilities downwards without providing support for managing the complexity of providing both formative and summative assessment to VET students.

Fragmentation of assessment responsibilities may be exacerbated in high trust, low accountability educational systems, especially if VET teachers lack either formal teacher education or sufficient vocational experience. Although the Norwegian educational system places considerable trust in teachers' assessments (Hopfenbeck et al., 2013), the lack of a qualified VET teacher workforce suggests that the integrity of locally designed assessment practices may be threatened. This is especially true considering the dual nature of the VET profession requiring teachers to combine vocational experience and pedagogical education.

Second, conflicting policy expectations for VET teacher assessment may threaten validity in assessment in VET contexts. VET teachers must negotiate school and work contexts when practicing assessment. Validity in VET assessment is therefore dependent on a range of contextual factors and spans a range of vocational traditions. Although policies strive to capture the nature of this negotiation in aims and objectives, the tacit elements of vocational competence are challenging to describe (Gills & Bateman, 1999; Lewkowicz, 2001; Newton & Baird, 2016). Although VET teachers and policymakers may agree that collaborations with local businesses afford opportunities for authentic learning through apprenticeships, the lack of policies specific to this purpose may lead to undesirable variance in assessment practices.

Third, the conflicting framings of VET teachers' assessment knowledge raise the question of what constitutes appropriate content in professional development for VET teachers. Despite the frequent mention of a need for professional development, few strategies are presented to address this issue. Some strategies suggested even appear to be entirely disconnected from a VET context. For example, *The VET Teacher Knowledge Promotion Initiative* (Kunnskapsdepartementet, 2015) suggests that further education in general academic subjects (e.g., mathematics or natural science) will raise the quality of VET teachers. This could be seen as an example of academic drift in VET. However, while offering VET teachers further education in academic subjects may help to integrate them into existing systems, this policy is unlikely to offer solutions to assessment problems in VET.

Limitations

This study analyses a limited selection of policy documents from one national context. The high trust, low accountability character of the Norwegian educational policy system allows teachers considerable professional discretion (Hopfenbeck et al., 2013). Snapshots of policies in a specific time and context offer the possibility of understanding definitions and suppositions in policy discourses as a site of 'motivated meaning and action' (Anderson & Holloway, 2020, p. 190). Nevertheless, the findings in the current study should be contrasted with VET assessment policies in other contexts. The lack of standards and shared terminology for assessment purposes (Rasmussen, 2016) is likely to lead to quite different policy solutions across contexts. Furthermore, the lack of a universal construct for teacher assessment literacy suggests that VET assessment policies should be studied as a contextually situated phenomenon (DeLuca et al., 2016).

Implications

We propose that policymakers acknowledge the role of wicked problems in VET and consider how the expectations for VET teachers' assessment practices are framed. Assessment policy development in VET contexts could benefit from finding the right balance between competitive and collaborative approaches to policy planning, so that dissenting parties and multiple stakeholders can find shared strategies for engaging with long-lasting challenges (Roberts, 2000). Exploring how teacher assessment literacy is conceptualised across policy contexts may contribute to a stronger theoretical knowledge base for VET assessment. This is particularly important considering that VET educators

must grapple with complex issues of skill shortages, school management, and workplace reforms (Garrick, 2011).

Particular attention should be given to the role of contextually situated traditions and the acquisition of tacit knowledge when developing the standards and curricula for VET. We also propose that VET practitioners reflect on their assessment roles and responsibilities, and how assessment policies affect their assessment practice. This is particularly important given the role of tacit knowledge and authentic learning in VET. Finally, we propose that VET teacher educators consider the strategies used in professional development offerings so that they reflect the particular nature of assessment in VET.

Forfatterbiografi

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